

*The* BONNOT COMPANY  
CANTON, OHIO.



CLAY WORKING MACHINERY



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COMBINED BRICK MACHINES

AND

PUGMILLS

BRICK AND TILE CUTTERS

BULLETIN

CC

A COMPLETE LINE  
OF  
CLAY-WORKING  
MACHINERY

THE  
BONNOT COMPANY  
CANTON, OHIO

STANDARD CLAY PRODUCTS, LIMITED



LET US  
STANDARDIZE  
YOUR PLANT

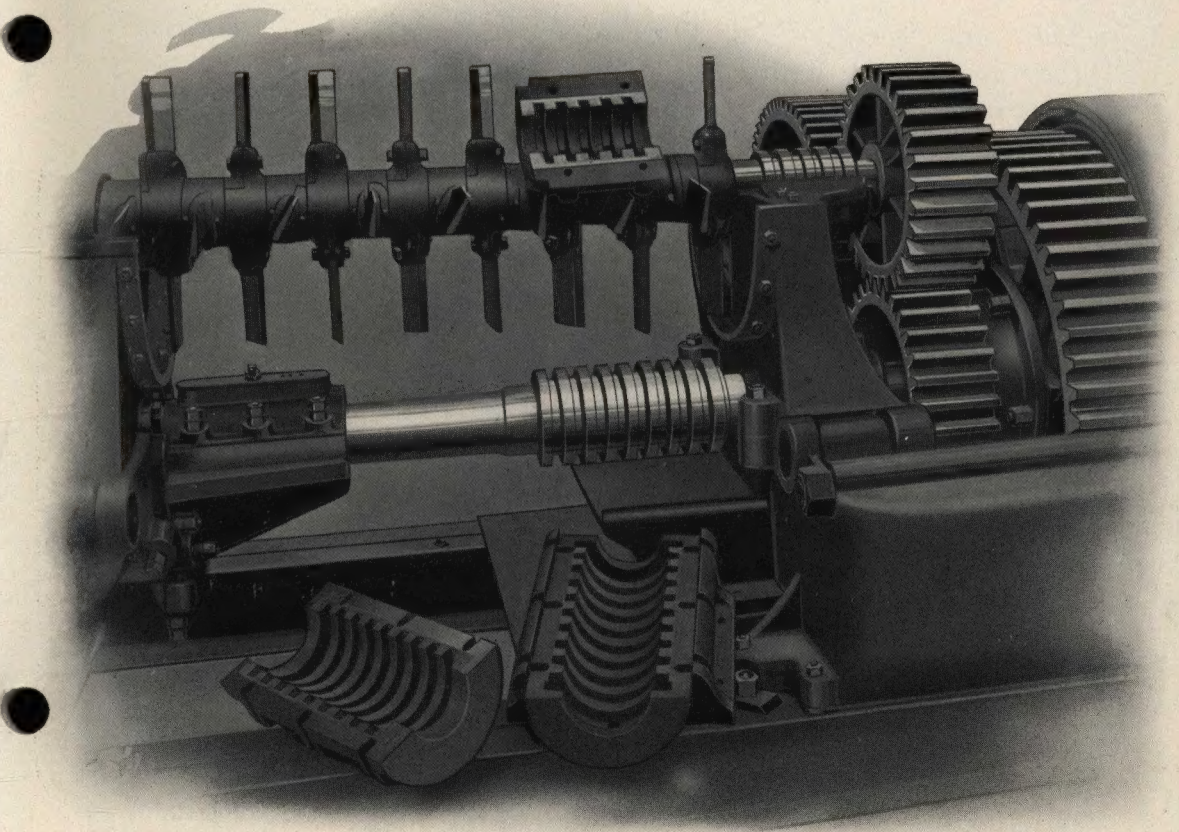


## Combined Brick Machines and Pugmills

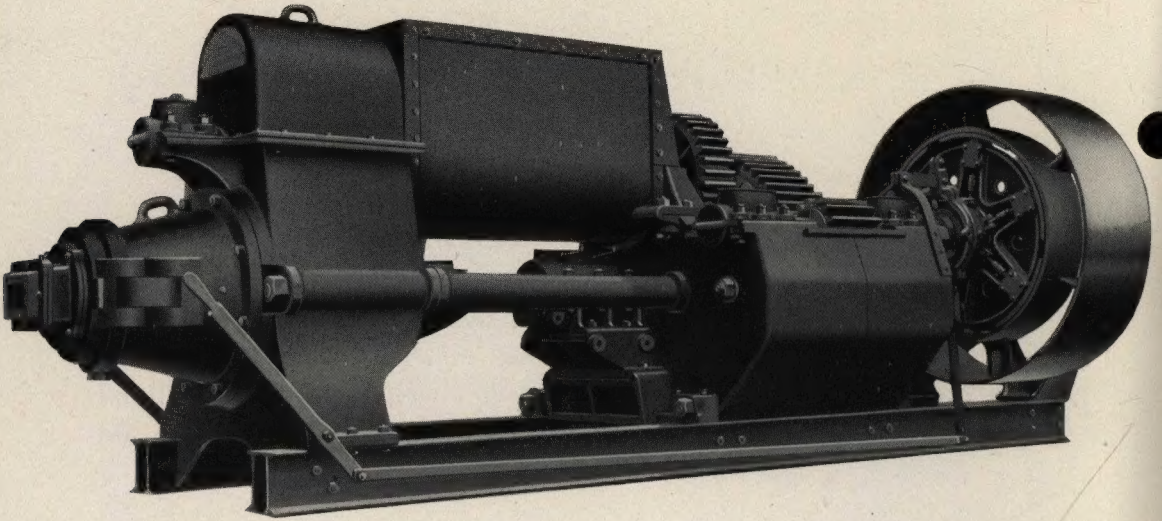
**O**UR line of combined machines includes both single and double geared and any capacity from 25,000 to 150,000 daily. Special attention is called to the thrust bearings which we use and their accessibility. These machines have oil pans in the frames and dust-tight gear covers to insure proper protection and lubrication of the gears.

The shafts and bearings are oversize for the work required and these machines will operate with a minimum amount of repairs.

We also have a complete line of auger machines and pugmills both single and double geared which are described in another bulletin "A-P."







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Canton Special Brick Machine—Single Geared

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### Frame

The frame is cast in two pieces and the surface machined where they are joined together, giving the effect of a single-piece frame. It is mounted on four 10-inch I-beams set in pairs and extending the full length of the machine.

### Gears

Cut steel gearing is used throughout. The master gear has 71 teeth, 15-inch face,  $2\frac{3}{4}$ -inch pitch. Pinion has 14 teeth. Pugmill gears have 33 teeth and 38 teeth respectively, are 9-inch face and  $2\frac{1}{2}$ -inch pitch. Oil pan is provided in bottom of frame and a tight cover of sheet metal protects the gears from dust.

### Shafting

Main shaft is a steel forging 6 inches diameter, machined to exact dimensions where it carries the knives and augers. Countershaft is  $5\frac{1}{2}$  inches diameter and is turned steel. Pugmill shaft is 5 inches square.

### Thrust and Bearings

This machine has the regular type of marine thrust bearing and in addition a thrust plate at the end of main shaft. The marine thrust has 10 collars,  $10\frac{3}{4}$  inches diameter, and has a total thrust area of 432 square inches. The bearings for countershaft are 14 inches long.



### **Pugmill**

Standard length of pugmill is 5 feet. Pugmill shell is  $\frac{1}{4}$ -inch steel plate reinforced around the top by steel angles. Diameter of shell is 30 inches. Force feed knives at discharge end prevent the clay from bridging over. Interlocking hubs are used in this machine, which makes each knife and hub independent of the others.

### **Front Housing and Nozzle**

The front housing connects the discharge end of the pugmill with the auger chamber. It is joined to gear frame by heavy cast-iron stretchers reinforced by steel rods. This housing and the nozzle have machined joints and both have ribbed liners for taking the wear. Front of machine is provided with hinge and safety bolt.

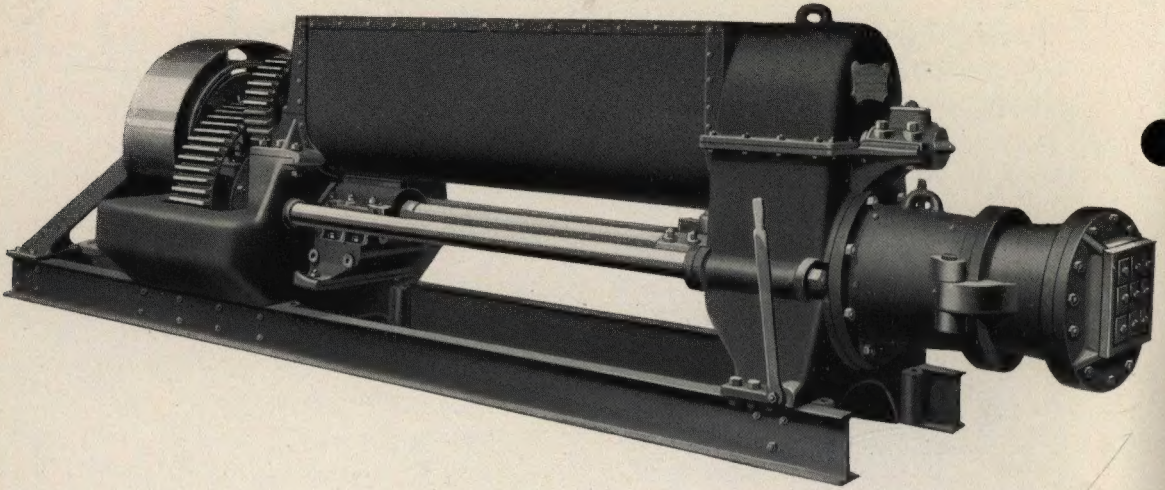
### **Driving Pulley**

Driving pulley is 6-arm friction clutch. It is 68 inches diameter, 24-inch face. Speed, 130 r.p.m.

### **Dimensions**

Length with 5-foot pugmill, 20 feet 11 inches. Width, 9 feet 9 inches. Height, 7 feet 3 inches. Capacity, 10,000 to 15,000 standard brick per hour. Weight, 42,000 pounds.





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No. 32 Combined Pugmill and Brick Machine

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### **Frame**

The gear frame is of the one-piece type having oil chamber cast in bottom for lubricating the gears. It is mounted on two 12-inch I-beams which extend the full length of the machine, making it fully self-contained.

### **Gears**

The machine is single geared and has cut steel gearing throughout. The main gear has 58 teeth, 15-inch face,  $2\frac{3}{4}$ -inch pitch. Pinion has 13 teeth. Pugmill gears have 27 teeth and 35 teeth respectively. Both are 9 inches face,  $2\frac{1}{2}$  inches pitch. A tight cover of sheet metal is provided for protecting the gears.

### **Shafting**

The main shaft is 6 inches diameter and is a steel forging. Counter-shaft is turned steel, 5 inches diameter. Pugmill shaft is 5 inches square.

### **Thrust and Bearings**

The usual type of marine thrust bearing is used for both main thrust and pugmill. The main thrust has seven collars  $11\frac{1}{2}$  inches diameter and contains 329 square inches of thrust surface. The pugmill thrust is 9 inches diameter.

### **Pugmill**

Standard length of pugmill is 10 feet. The shell is  $\frac{1}{4}$ -inch steel plate with reinforcement of steel angles around the top. The hubs



used are our interlocking pattern, making each hub and knife independent of the others. Force feed knives in discharge end of pugmill prevent the clay bridging over or choking where it discharges into the auger chamber.

### **Front Housing and Nozzle**

The front housing connects the discharge end of the pugmill with the auger chamber. It is joined to gear frame by heavy cast-iron stretchers reinforced by steel rods. This housing and the nozzle have machined joints and both have ribbed liners for taking the wear. Front of machine is provided with hinge and safety bolt.

### **Pulley**

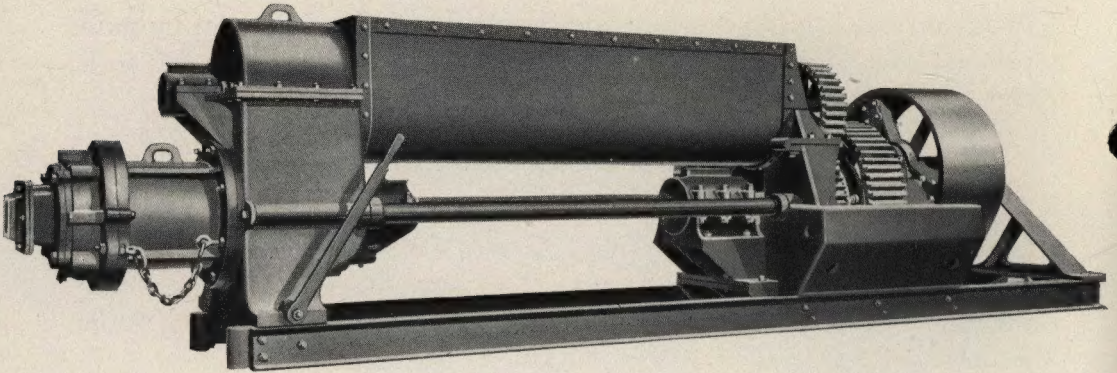
Driving pulley is 60 inches diameter, 24-inch face, and speed 140 r.p.m. It is our special 6-armed type of heavy duty clutch.

### **Dimensions**

Length not including extension for attaching dies is 25 feet 3 inches. Width, 8 feet. Height, 6 feet 11 inches. Capacity, 7,500 to 12,500 brick per hour. Weight, 38,000 pounds.

NOTE. This machine is built also as a special hollow ware machine and will make 200 tons and more of standard size per day under average conditions.





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No. 30 Combined Pugmill and Brick Machine

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### **Frame**

The No. 30 machine is mounted on two 7-inch I-beams extended to carry the outside bearing for pulley shaft. Gear frame is a one-piece casting with oil chamber in the bottom for lubricating the gears. The front housing at discharge end of pugmill is joined to gear frame by heavy cast-iron spreaders reinforced by 1½-inch steel rods.

### **Gears**

This machine is single geared, having only one gear and pinion in addition to the two gears which drive the pugmill. The gears are all of cast steel. Main gear has 57 teeth, is 10 inches face and 2-inch pitch. Pinion has 12 teeth. Pugmill gears have 33 teeth, are 6 inches face and 2-inch pitch. Dust-tight cover is furnished to exclude dirt.

### **Shafting**

The main shaft is a steel forging 5 inches diameter, countershaft is 4 inches diameter of turned steel.

### **Thrust and Bearings**

The main thrust bearing is located in front of the gear frame and under the back end of pugmill. It is of the marine type, self-oiling. This bearing is easy of access, without disturbing other parts. This thrust bearing has five collars 9¾ inches diameter and contains 210 square inches of thrust surface.

### **Pugmill**

Pugmill shell is 8 feet long, 24 inches diameter, made of ¼-inch steel plate and reinforced on the top with 2-inch steel angles. The



pugmill is equipped with interlocking hubs, so that any hub or knife can be replaced independently of others. Force feed knives are provided at front end to prevent clay bridging over where it discharges into the auger chamber.

### **Front Housing and Nozzle**

This front is machined where nozzle attaches and nozzle also has ribbed liners which are removable. Front is hinged and provided with safety bolt. It is joined to the gear frame of the machine by cast-iron stretchers reinforced by steel rods. The front housing connects the discharge end of pugmill with auger chamber and is provided with liners on the inside to take up the wear.

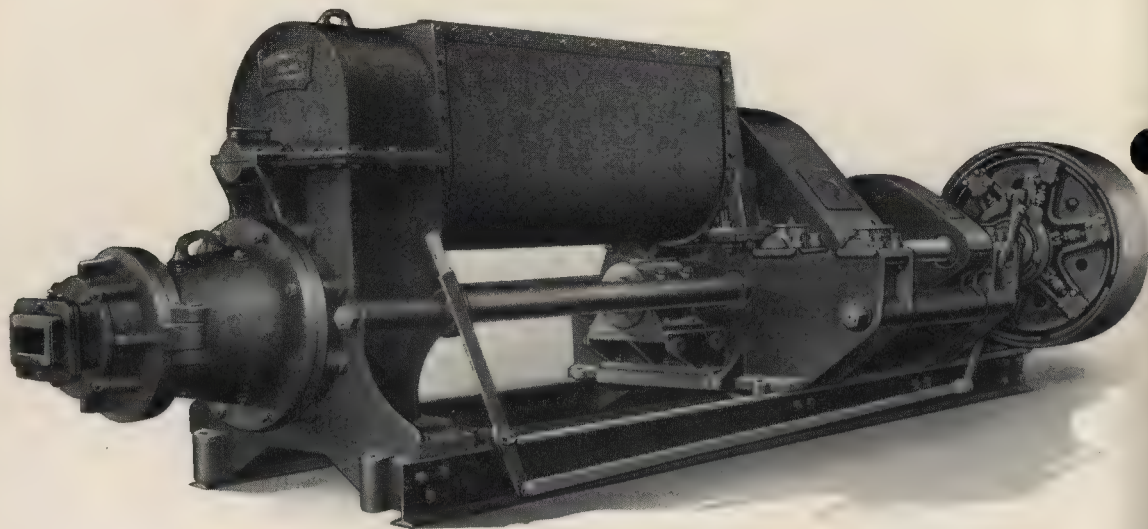
### **Driving Pulley**

The driving pulley is a 3-arm friction clutch, 44 inches diameter, 20-inch face, and runs 140 r.p.m.

### **Dimensions**

Length over all with 8-inch pugmill, 19 feet 11 inches. Width, 5 feet 9 inches. Height, 5 feet  $\frac{1}{2}$  inch. Capacity, 3,000 to 4,000 brick per hour. Weight, 15,000 pounds.





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No. 40 Combined Pugmill and Brick Machine

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### **Frame**

The frame is our standard two-piece type mounted on two 10-inch I-beams, making it self-contained. There is an oil-tight pan in the bottom of frame so that gears may be run in oil.

### **Gears**

Cut steel gearing is used throughout. The main gear has 50 teeth, 10-inch face,  $2\frac{3}{4}$ -inch pitch. Pinion has 13 teeth. Intermediate gear has 48 teeth, 8-inch face, 2-inch pitch. Pinion has 14 teeth. Pugmill gears have 33 teeth, 8-inch face,  $2\frac{1}{2}$ -inch pitch. A dust-tight cover of sheet metal protects the gears.

### **Shafting**

The main shaft is a steel forging 6 inches diameter. The part which carries the knives and augers is hexagon and is machined to accurate dimensions. Intermediate shaft is 5 inches diameter and countershaft 4 inches. Both are best grade of turned shafting. Pugmill shaft is  $4\frac{1}{2}$  inches diameter.

### **Thrust and Bearings**

Both main shaft and pugmill shaft have the marine type of thrust. The main thrust has six collars 10 inches diameter with an area of 170 square inches. Pugmill thrust is  $7\frac{1}{2}$  inches diameter. Bearings for intermediate and countershaft are  $13\frac{1}{2}$  inches long.



### **Pugmill**

The standard length of pugmill shell is 10 feet. Shell is 30 inches diameter,  $\frac{1}{4}$ -inch steel plate reinforced with 2-inch angles around the top. Our standard pattern of interlocking hubs is used, making each hub and knife independent of the others. Force feed knives at discharge end prevent the clay bridging over.

### **Front Housing and Nozzle**

The front housing connects the discharge end of the pugmill with the auger chamber. It is joined to gear frame by heavy cast-iron stretchers reinforced by steel rods. This housing and the nozzle have machined joints and both have ribbed liners for taking the wear. Front of machine is provided with hinge and safety bolt.

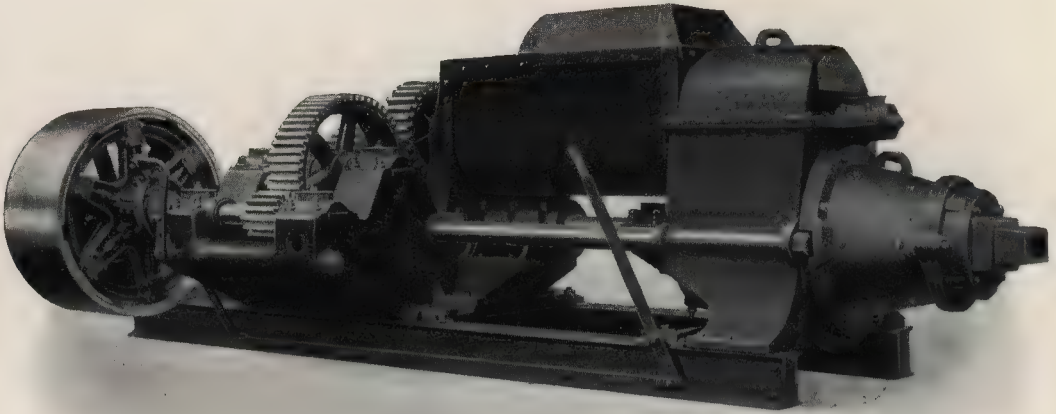
### **Pulley**

Driving pulley is our 6-arm heavy duty clutch. It is 48 inches diameter, 18-inch face, and speed is 265 r.p.m.

### **Dimensions**

Length with 10-foot pugmill, 24 feet 5 inches. Width, 8 feet 4 inches. Height, 6 feet 8 inches. Capacity, 7,500 to 12,500 standard brick per hour. Weight, 30,000 pounds.





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Canton Special Brick Machine

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### **Frame**

The main frame is cast in two pieces and the surface machined where they join, giving the effect of a single-piece frame. It is mounted on four 10-inch I-beams, set in pairs and extending the full length of the machine.

### **Gears**

All the gearing is cut steel. The main gear has 61 teeth, 12-inch face,  $2\frac{3}{4}$ -inch pitch. Pinion has 15 teeth. Intermediate gear has 56 teeth, 10-inch face, 2-inch pitch. Intermediate pinion has 15 teeth. Both pugmill gears have 29 teeth, 9-inch face and  $2\frac{1}{2}$ -inch pitch.

### **Shafting**

The main shaft is steel forging 6 inches diameter and is machined to exact size where it carries the knives and augers. Intermediate shaft is  $5\frac{1}{2}$  inches diameter and countershaft is  $4\frac{1}{2}$  inches diameter. Both are turned steel. Pugmill shaft is  $4\frac{1}{2}$  inches diameter.

### **Thrust and Bearings**

The main thrust bearing is self-oiling, of the marine type, and located in front of frame where it is readily accessible. This bearing has 10 thrust collars  $10\frac{3}{4}$  inches diameter and contains 405 square inches of thrust area. The pugmill thrust is of the same type and is  $7\frac{1}{2}$  inches diameter. Bearings for countershaft and intermediate shaft are 14 inches long.



### **Pugmill**

Standard length of pugmill is 5 feet. Pugmill shell is 30 inches diameter, made of  $\frac{1}{4}$ -inch steel plate and reinforced by angles around the top. Our standard design of interlocking hub is used, making each hub and knife independent of others. Force feed knives at discharge end prevent the clay bridging over.

### **Front Housing and Nozzle**

The front housing connects the discharge end of pugmill with auger chamber and is provided with liners. The front is machined where nozzle attaches and nozzle also has ribbed liners which can be renewed. It is hinged and provided with safety bolt. The front is joined to the gear frame of the machine by cast-iron stretchers reinforced by steel rods.

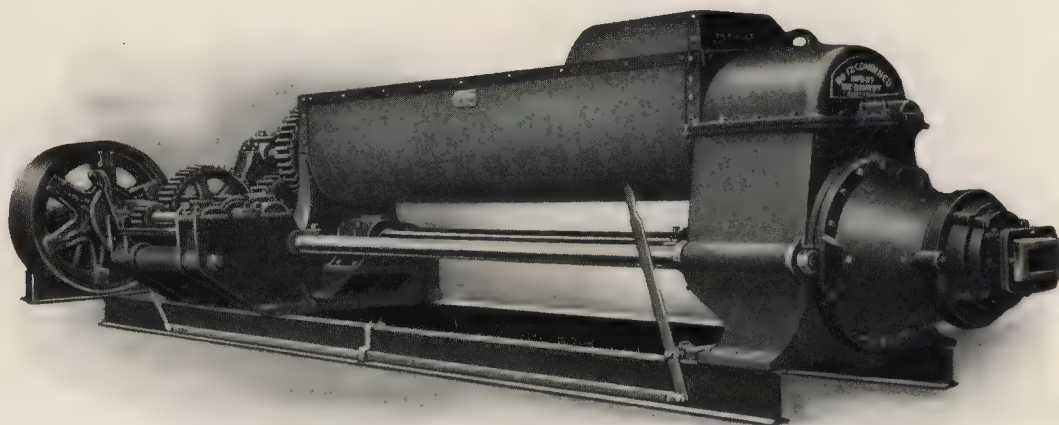
### **Driving Pulley**

Driving pulley is 48 inches diameter, 20-inch face, and speed 260 r.p.m.

### **Dimensions**

Length with 5-foot pugmill, 19 feet 7 inches. Width, 10 feet. Height, 5 feet 10 inches. Capacity, 10,000 to 15,000 standard brick per hour. Weight, 35,000 pounds.





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No. 12 Combined Pugmill and Brick Machine

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### **Frame**

The frame of this machine is extra heavy and of the two-piece type joined by spreaders and reinforced by  $2\frac{1}{2}$ -inch steel rods. It is mounted on two 10-inch I-beams extending full length, including outer bearing for pulley shaft. Pugmill shaft is also supported at back end by a bearing resting on the frame.

### **Gears**

The entire set of gears are of cast steel. The master gear has 50 teeth, 10-inch face,  $2\frac{3}{4}$ -inch pitch; pinion has 13 teeth. Intermediate gear has 48 teeth, 8-inch face, 2-inch pitch, and pinion has 14 teeth. Pugmill gears are 8-inch face,  $2\frac{1}{2}$ -inch pitch. A dust-tight cover of sheet metal protects the gears.

### **Shafting**

The main shaft is 6 inches diameter and a steel forging. The intermediate shaft is 5 inches diameter and countershaft is  $4\frac{1}{2}$  inches. Both are turned steel. Pugmill shaft is  $4\frac{1}{2}$  inches diameter.

### **Thrust and Bearings**

The collared or marine type of thrust is used. It is self-oiling and is located in front of the frame. The bearing is 10 inches diameter and has a series of six collars, giving a thrust area of 170 inches. Pugmill thrust is of the same general design and is  $7\frac{1}{2}$  inches diameter.



### **Pugmill**

Pugmill shell is 30 inches diameter and can be any length up to 10 feet. It is  $\frac{1}{4}$ -inch steel plate and reinforced on the top by 2-inch steel angles. Pugmill shaft is  $4\frac{1}{2}$  inches square with interlocking hubs. It is arranged so that any knife or hub can be replaced independently of others. Force feed knives at discharge end prevent clay bridging over where it discharges into the auger chamber.

### **Front Housing and Nozzle**

The front housing connects the discharge end of pugmill with the auger chamber. It is joined to gear frame by heavy cast-iron stretchers reinforced by steel rods. This housing and the nozzle have machined joints and both have ribbed liners for taking the wear. Front of machine is provided with hinge and safety bolt.

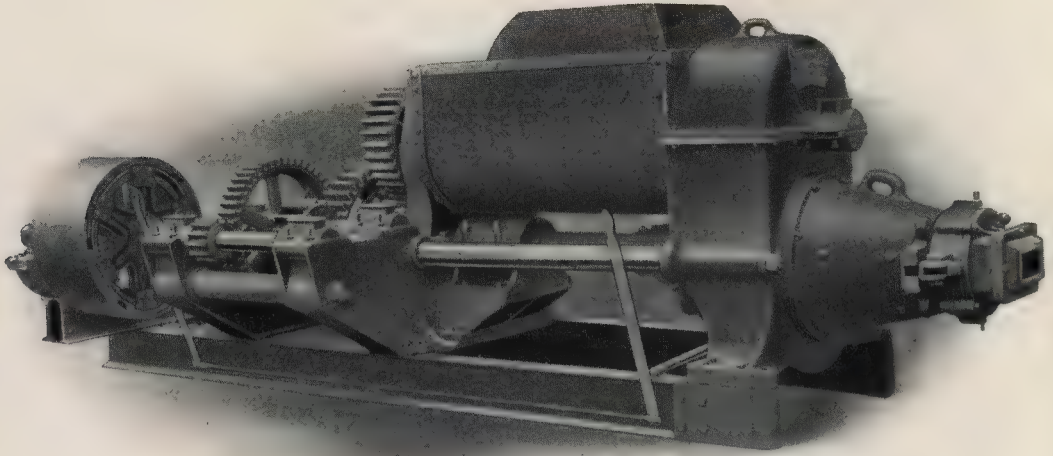
### **Pulley**

The driving pulley is our standard 6-arm heavy duty clutch. It is 48 inches diameter, 18-inch face, and should run 265 r.p.m.

### **Dimensions**

Length with 10-foot pugmill is 24 feet 10 inches. Width, 8 feet 4 inches. Height, 6 feet 2 inches. Capacity, 7,500 to 12,500 brick per hour. Weight with 10-foot pugmill, 35,000 pounds.





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No. 6 Combined Pugmill and Brick Machine

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### **Frame**

The standard two-piece frame is used for this machine. It is mounted on two 10-inch I-beams which are extended to carry the outer bearing for pulley shaft.

### **Gears**

All gears are of cast steel. The main gear has 40 teeth, 10-inch face,  $2\frac{3}{4}$ -inch pitch. Pinion has 13 teeth. Intermediate gears are 8-inch face, 2-inch pitch; pugmill gears, 8-inch face,  $2\frac{1}{2}$ -inch pitch. We furnish a tight cover of sheet metal to protect the gearing from dust and dirt.

### **Shafting**

The main shaft is a steel forging 6 inches diameter. The intermediate shaft is  $4\frac{1}{2}$  inches, the countershaft 4 inches. These are turned steel. The pugmill shaft is  $4\frac{1}{2}$  inches diameter.

### **Thrust and Bearings**

The regular marine type of thrust bearing is used. It has six collars 10 inches in diameter and is self-oiling. It has a thrust area of 170 square inches. It is carried on a base in front of the gear frame, where it is easily accessible. The bearings for intermediate and countershafts are 12 inches in length.



### **Pugmill**

Shell of pugmill is 10 feet long, 30 inches diameter, of  $\frac{1}{4}$ -inch steel plate. It is reinforced along the top by 2-inch steel angles. The hubs are of the interlocking type, so that any knife or hub can be replaced independently of others. Special force feed knives prevent the clay from bridging over at discharge end of pugmill.

### **Front Housing and Nozzle**

This front is machined where nozzle attaches and nozzle also has ribbed liners which are removable. Front is hinged and provided with safety bolt. The front housing connects the discharge end of pugmill with auger chamber, and is provided with liners in the inside to take up the wear. It is joined to the gear frame of the machine by cast-iron stretchers reinforced by steel rods.

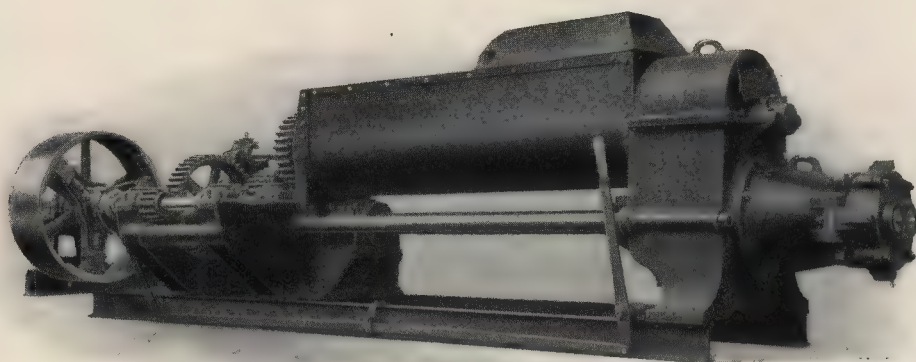
### **Driving Pulley**

The driving pulley is 48 inches diameter, 16-inch face, and speed is 250 r.p.m.

### **Dimensions**

Length over all with 10-foot pugmill, 23 feet 8 inches. Width, 7 feet 4 inches. Height, 5 feet  $5\frac{1}{2}$  inches. Capacity, 5,000 to 7,000 brick per hour. Weight, 24,500 pounds.





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No. 14 Combined Pugmill and Brick Machine

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### **Frame**

The gear frame is our standard reinforced two-piece type. It is mounted on two 7-inch I-beams extended to carry the outer bearing for driving shaft. The pugmill shaft is also supported at back end by a bearing resting on the frame. The front frame is designed to give free discharge of the clay from the pugmill to the auger chamber. The front frame and gear frame are joined by heavy cast-iron spreaders reinforced by 1½-inch steel rods.

### **Gears**

All gears are steel castings of the following dimensions: Main gear, 48 teeth, 8-inch face, 2-inch pitch; pinion has 14 teeth. Intermediate gear has 46 teeth, 6-inch face, 2-inch pitch. A cover of sheet metal fully protecting the gears from dirt is included. A tight cover is furnished which completely covers the gears.

### **Shafting**

The main shaft is a steel forging 5 inches diameter. Intermediate and countershafts are turned steel, respectively 4 inches and 3½ inches. Pugmill shaft is 4½ inches diameter.

### **Thrust and Bearings**

The main thrust bearing is of the self-oiling marine type and is located in front of gear frame on a base which permits access to the bearing without disturbing other parts. This bearing is 8 inches



diameter, has five thrust collars, giving a thrust of 120 square inches. The pugmill thrust is of this same type,  $6\frac{1}{4}$  inches diameter. Bearings for countershaft and intermediate shaft are 7 inches long.

### **Pugmill**

Pugmill shell is 8 feet long, 24 inches diameter, made of  $\frac{1}{4}$ -inch steel plate and reinforced on the top with 2-inch steel angles. The pugmill is equipped with interlocking hubs, so that any hub or knife can be replaced independently of others. Force feed knives are provided at front end to prevent clay bridging over where it discharges into the auger chamber.

### **Front Housing and Nozzle**

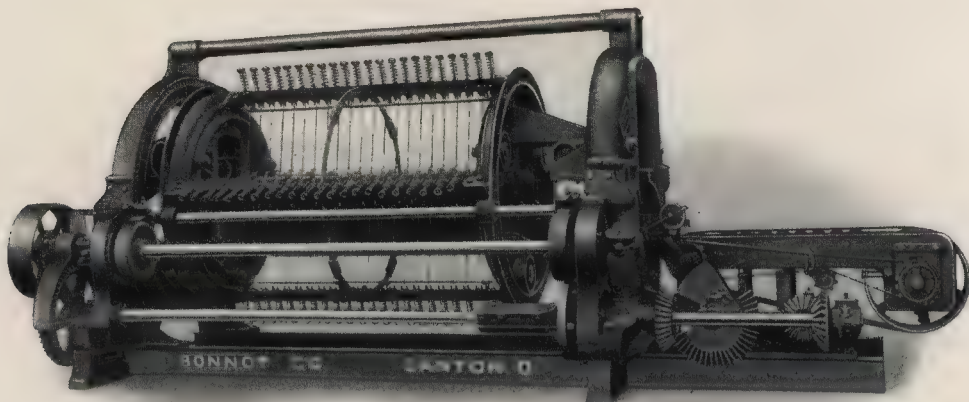
This front is machined where nozzle is attached and nozzle also has ribbed liners which are removable. Front is hinged and provided with safety bolt. It is joined to the gear frame of the machine by cast-iron stretchers reinforced by steel rods. The front housing connects the discharge end of pugmill with auger chamber and is provided with liners on the inside to take up the wear.

### **Pulley**

Driving pulley is 40 inches diameter, 14 inches face, of the three-arm friction type. Speed, 235 r.p.m.

### **Dimensions**

Length over all with 8-foot pugmill, 19 feet 3 inches. Width, 6 feet 4 inches. Height, 4 feet 10 inches. Capacity, 3,000 to 4,000 brick per hour. Weight, 15,000 pounds.



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### Rotary Automatic Cutting Table

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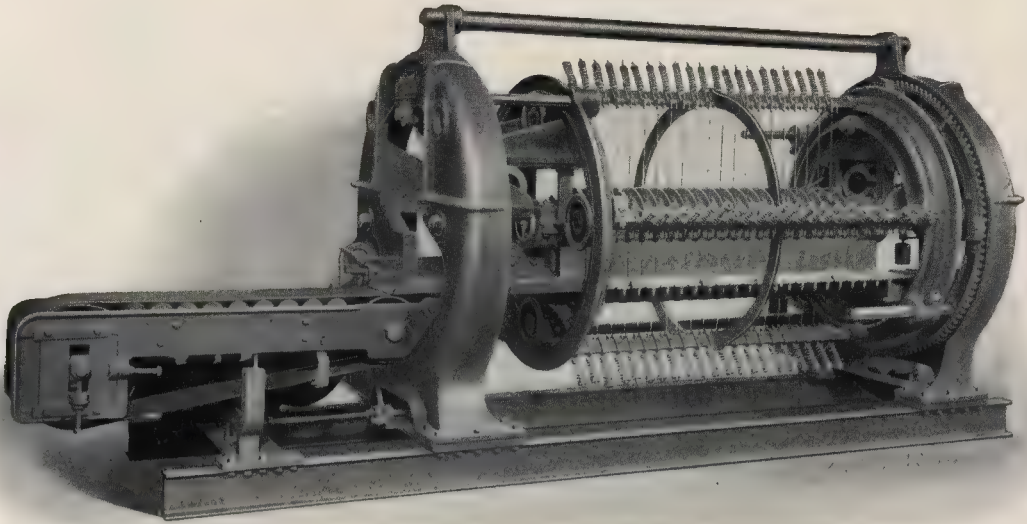
This cutter has the feature found exclusively in our machines of placing the cutting frame close to the die brick machine and putting the measuring belt at the opposite end. This permits of cutting brick on this table within 30 inches of the brick die and avoids the annoyance of a long column of clay between the die and the cutter.

The Rotary Automatic Cutting Table is mounted on two 6-inch I-beams, making the machine self-contained and insuring proper alignment. The end frames of this cutter are stationary, being bolted securely to the I-beams at the bottom and reinforced with cast-iron stretcher across the top. Inside of these frames are the main driving gears for the reel, the frames forming a housing for the gears and protecting them from dirt. The cutting reel has circular cast-iron ends which are supported in their rotary movement on large rollers and the end movement of the reel is also carried on rollers. By this arrangement there are no moving parts underneath the table where the dirt would interfere with the proper operation.

The reel is provided with four sets of cutting wires and makes a quarter turn at each movement of the table. This motion is controlled by the measuring pulley which is at the opposite end of cutter from the brick die.

Each revolution of the measuring pulley is equal to the combined width of the platens. Every time the measuring pulley makes one revolution it raises a trip and sets in motion the independent power





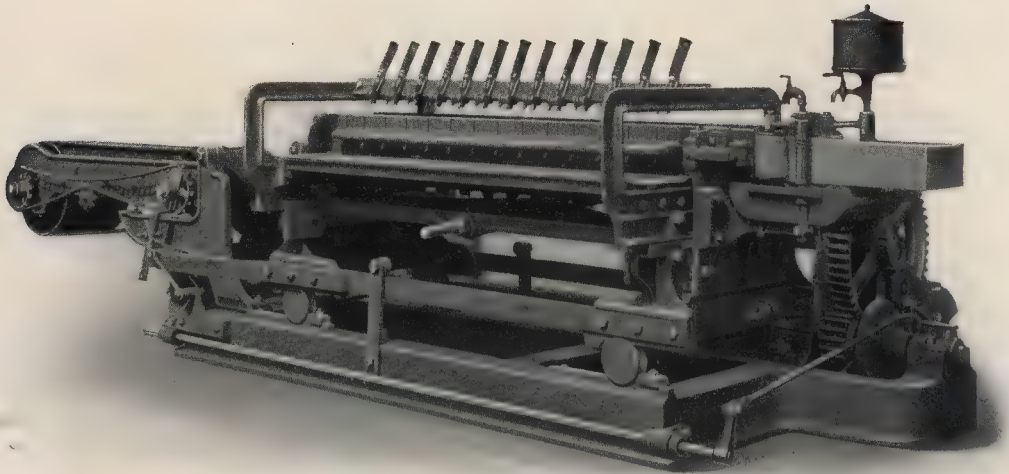
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Rotary Automatic Cutting Table

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by which the cutting is done and the reel drawn back into position for the next cut. The movement of the wires is a downward shearing motion which continues until the wire is practically through the column. This will give a fine, smooth edge on the brick.

Two flexible brakes are provided which stop the reel after each cut and do so without any jar on the machine. These brakes are provided with simple adjustment for taking up the wear. This cutter can be arranged for any capacity from 3,000 to 10,000 brick per hour. Drive pulley, 20 x 6 inches. Speed according to capacity wanted. Length, exclusive of delivery belt, 16 feet. Width, 6 feet. Height, 6 feet. Height of delivery belt, 28 $\frac{1}{8}$  inches. Weight of cutter, 10,000 pounds.



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Reciprocating Side-Cut Automatic Table

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The arrangement of this cutter is such that the cutting frame is placed next to the die of brick machine and the measuring belt on the opposite end. The measuring is done by the column after it has been cut but before the brick are separated. The measuring belt drives the measuring pulley, one revolution of which measures the proper length of column and trips the mechanism which sets in motion the independent power for making the cut and drawing the table back into position.

Machine is mounted on a substantial cast-iron base, making it self-contained and insuring the alignment. The base is machined and lined with steel tracks for the rollers which carry the cutting frame. The thrust bars can be removed and others substituted for changing the thickness of brick in a very few minutes. The thrust bars are adjustable to admit a column from  $7\frac{1}{2}$  inches to  $10\frac{1}{2}$  inches in width.

The wires on this table are very short, measuring  $12\frac{5}{8}$  inches in length, thus reducing the breakage to a minimum. The wires are easily changed while the table is operating. This table will cut brick within 26 inches of the brick machine die, which is a decided advantage over many conditions.

The separating belt is made up of angle iron side pieces and cast-iron frames. The belt is driven from the cutting table by sprocket chain at the proper speed. The belt is 12-inch wide 4-ply





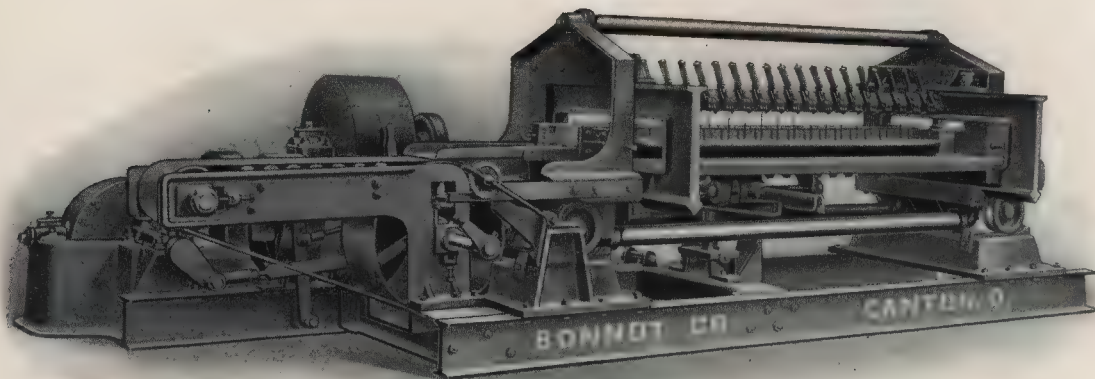
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Reciprocating Cutter with Right-Angle Delivery

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canvas. The end frame has take-up bearings for keeping the belt tight. The pulleys are 12 inches diameter, 12-inch face. The separating belt can be made any length desired, but 15-foot belt is supplied with table without extra charge.

Driving pulley, 18 x 6 inches. Speed, 180 r.p.m. Floor space, 13 feet 2 inches x 6 feet. Over all height, 3 feet 3 inches. Height of off-carrier,  $28\frac{1}{8}$  inches. Capacity, 5,000 to 8,000 standard size building brick per hour. Weight of table and separating belt, 5,500 pounds.



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Special Side-Cut Automatic Table

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This special reciprocating cutter is designed for extra heavy duty. Where a capacity of 10,000 to 15,000 brick per hour is desired this cutter will meet the requirements satisfactorily. The entire design is with a view of furnishing large capacity without undue strain or excessive speed of any of the working parts. The operating mechanism is a modification of our other cutters. The drive is by means of tight and loose pulley similar to that of a metal planer. Driving belt runs on the loose pulley until the column of clay has filled the platens, when it shifts to the tight pulley and the mechanism causes the table to cut through the column. On completing the cut the belt shifts immediately to the loose pulley, leaving the cutting frame at rest until the next cut is ready. This action makes the cutting table absolutely free from any jarring, while in operation.

The cutter is mounted on 8-inch steel beams having suitable cast-iron base or frames bolted to the I-beams. These frames are machined, insuring smooth running and perfect alignment of the table.

The guides on which the cutting frame moves laterally are of the "V" type inverted so that no clay can fall in them. The cutter moves with the column of clay while the brick are being cut, and this movement is on large rollers operating on tracks and protected from dirt.

The length of column which is cut at each operation is 72 inches, which enables the cutter to have large capacity with a relatively

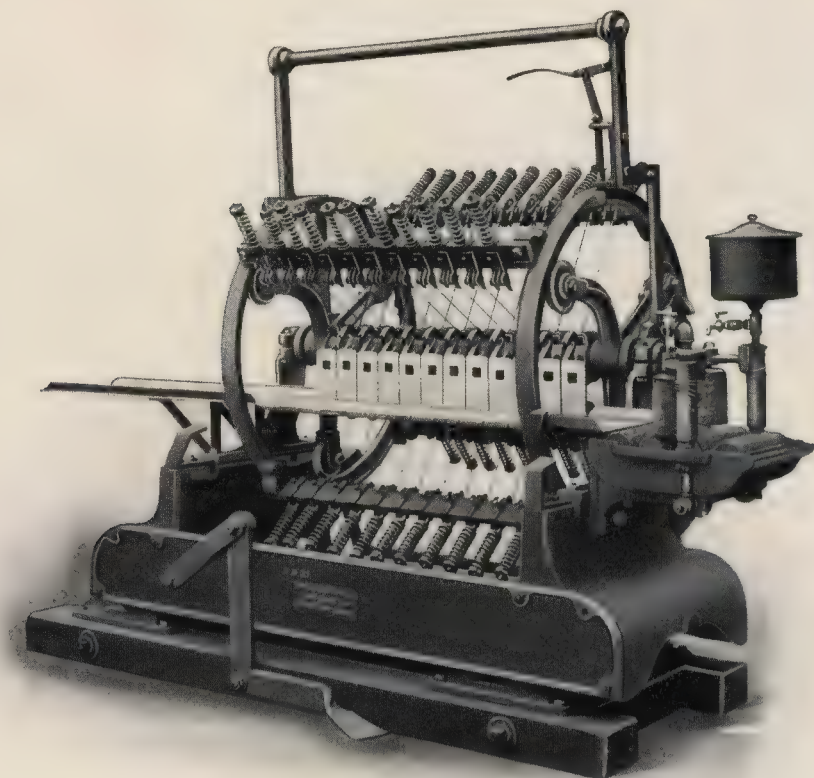


slow movement. All the gearing used on this table is of cut steel and encased in dust-proof covers for protection.

A flexible band brake is used to stop the lateral movement of the cutting frame. At each movement of the frame when the cut has been completed, the brake applies just enough pressure to bring the cutting frame to a stop without any jar.

This cutter will cut brick within 30 inches of the die. The thrust bars are adjustable to admit a column  $7\frac{1}{2}$  inches to 12 inches in width. The wires on this cutter are very short, thus reducing breakage, and broken wires are easily replaced while the cutter is in operation.

Length with off-carrier, 15 feet 3 inches. Width, 7 feet 4 inches. Height, 4 feet 6 inches. Capacity, 10,000 to 15,000 brick per hour. Weight, 10,000 pounds.



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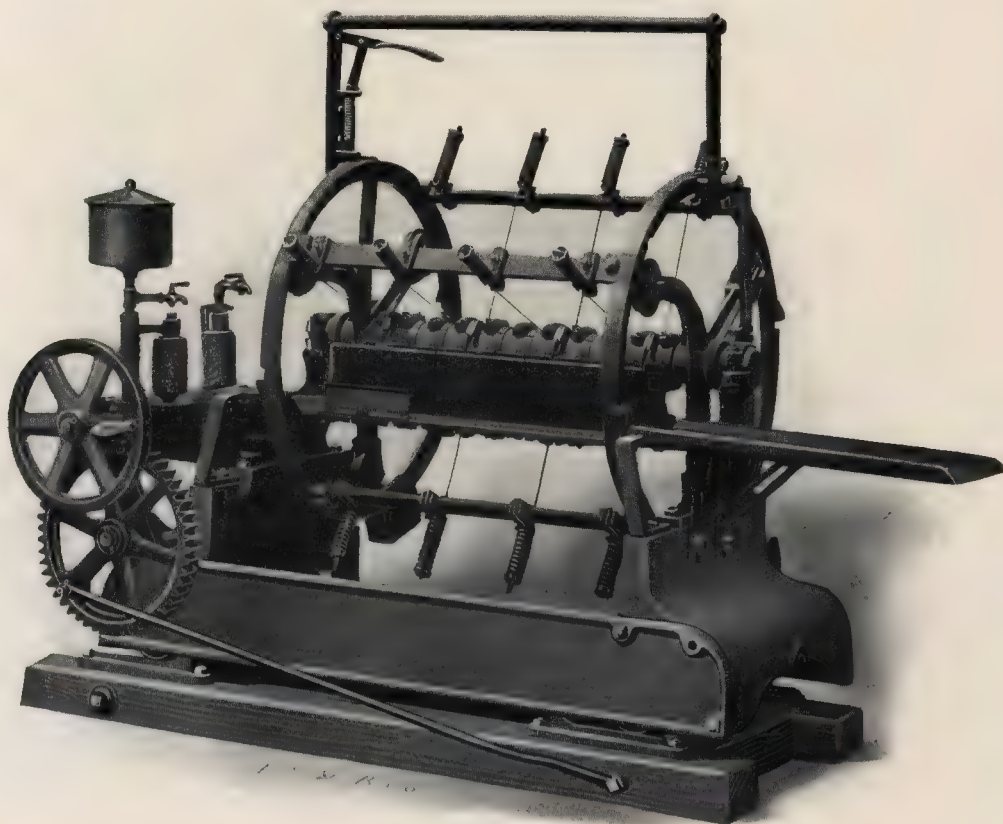
Revolving Table for Side-Cut Brick

---

The Revolving Table is particularly adapted to the making of the highest grade of fine front brick. It is arranged with downward movement of the cutting wires, which, together with the method of supporting the column, gives a very smooth edge on the brick. The machine has a substantial iron base, carrying cutting reel which contains four sets of wires. The cutting is done by a downward movement of the lever, and table is returned to position by means of foot treadle, making the movement of table comparatively easy. This table can only be furnished for belt delivery.

The platen and thrust bars are carefully fitted and securely held in position by means of countersunk bolts and dowel pin, which prevents their moving. Table is provided with our special wire fasteners and suitable lubricating device.





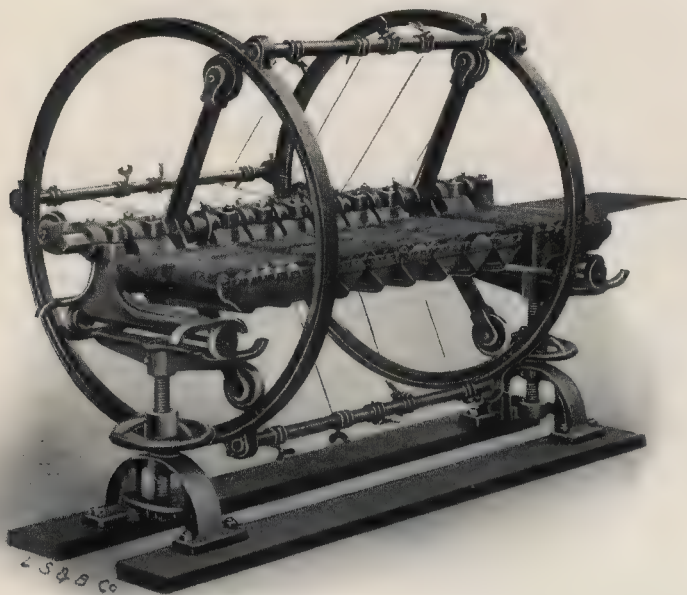
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Revolving Table for End-Cut Brick

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Our Revolving Table for side-cut brick has proven so satisfactory that there has been a demand for a table of the same general design arranged for end-cut brick. The same style of construction is used, and the end-cut table can be supplied for cutting either single or double stream, as may be desired. The illustration shows the table with handwheel for returning to position after cutting. We can supply it with this device or with treadle, if preferred.

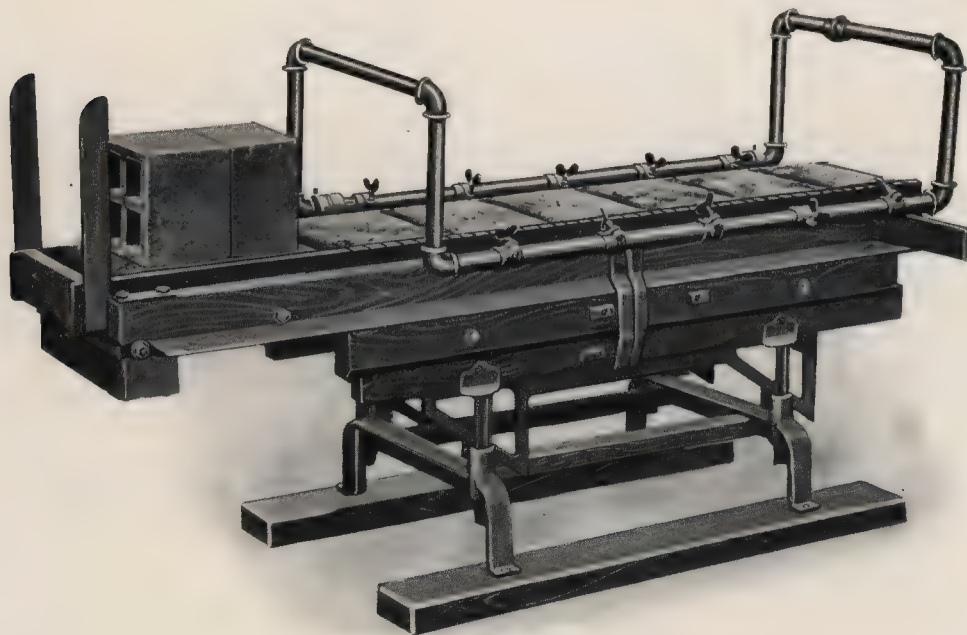
Where very smooth brick are desired, this table will be found to give the very best of satisfaction.



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Revolving Tile Cutting Table

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Hollow Block Cutting Table

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Hand Rotary Hollow Block Cutter

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The capacity of the cutter will take care of four 12 x 12-inch tile in size and length.

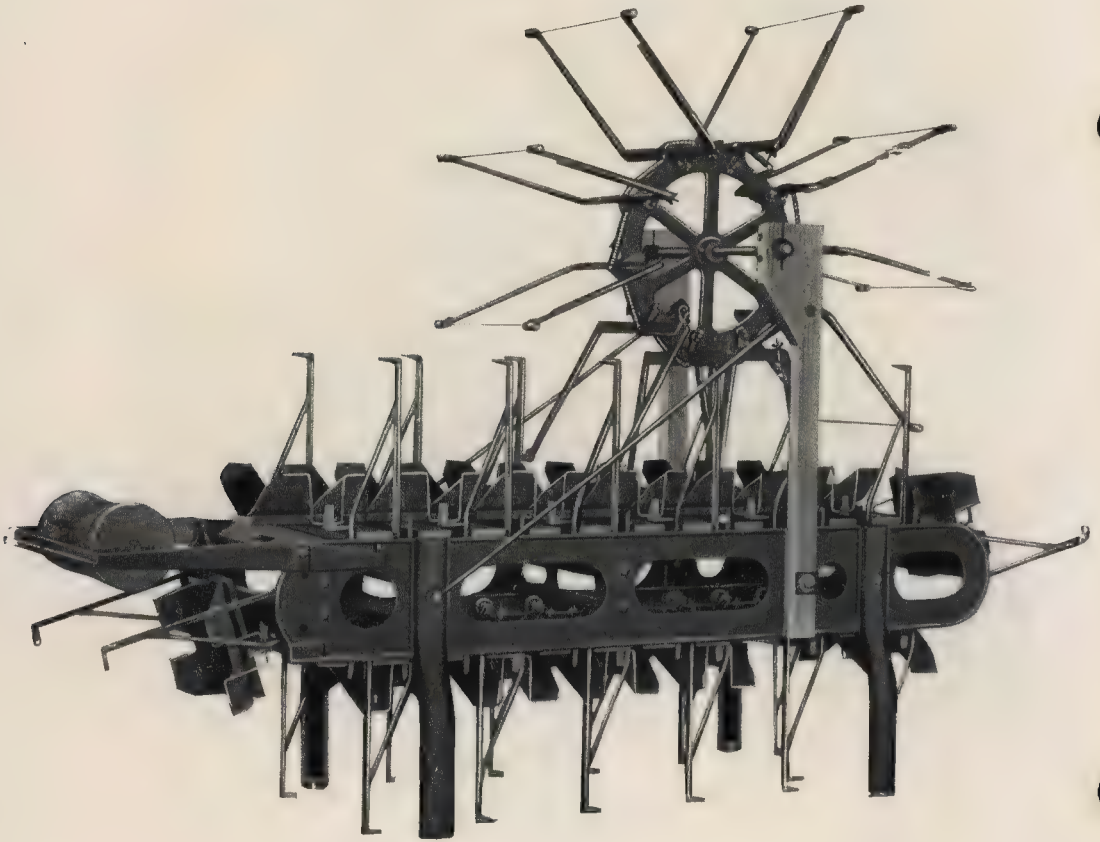
The cutting reel has three sets of cutting wires attached with improved wire fasteners in which the wires are very quickly replaced.

The motion of the cutting reel is downward through tile and platen, which is operated by hand and in one direction only.

Different length cuts are provided for by different platens, which are constructed as a unit and easily exchanged.

The platen proper is made of wood and with projecting arms special cuts can be arranged for at factory without removing the platen. The object of meeting special cuts was well considered in the designing and is one of the special features of this cutter.

The adjustment to meet position of dies is likewise well taken care of.



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Automatic Tile Cutter

---

The construction of the Automatic Tile Cutter is extremely simple and will be easily understood. The cutter is placed squarely in front of the machine, and the friction of the clay upon the carrier puts the cutter in motion, and as long as the column issues from the machine the reel turns and the tile will cut fast or slow, according to the speed of the column. The same carriers serve for every size of tile up to 8-inch, and are easily adjusted. The arms of the reel are not fixed in their socket but have a given amount of play, and the points between which the cutting wires are stretched are provided with small rollers, which meet the iron guides on the carrier belt and carry the wires downward through the column. The tile carriers can be taken off by simply turning a button on the underside of each, and flat carriers for building blocks can be put on by the same means.





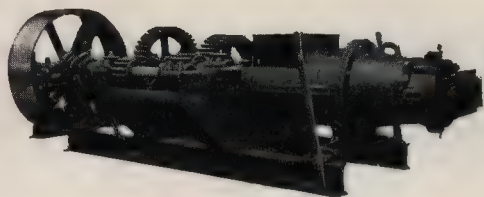
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Board Delivery Cutting Table

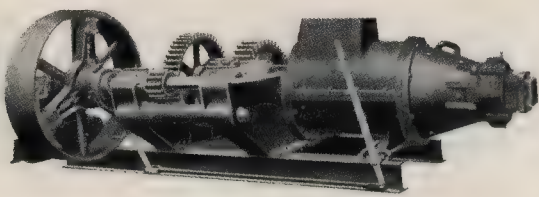
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We have combined in this table the essential features of a board delivery cutting table, which are ease of operation, adjustments for wearing parts and quick replacing of wires. These points make it a very advantageous and desirable table. The special wire fastener, which is found only on our tables, is superior to any other device of its kind. The tension on the wire is adjusted by means of a coil spring on the table and is left unchanged. When the wire breaks, the hook is thrown forward, the wire slipped on and the hook thrown back to its original position, the wire being drawn to the proper tension when the hook is thrown back. Table is arranged to cut twelve brick at each movement of the lever. The oil rollers in bottom and at sides of column give ample lubrication and can be instantly removed from the table when necessary to clean them.

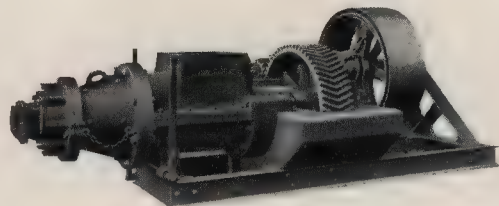
This table is also made in extra size for cutting Roman brick, when ordered.



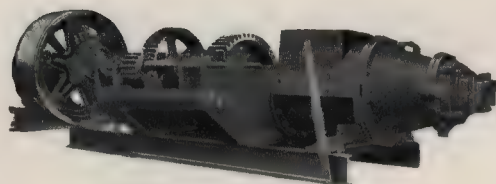
No. 8 Auger Machine



No. 10 Auger Machine



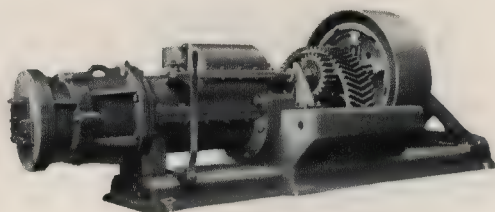
No. 18 Auger Machine



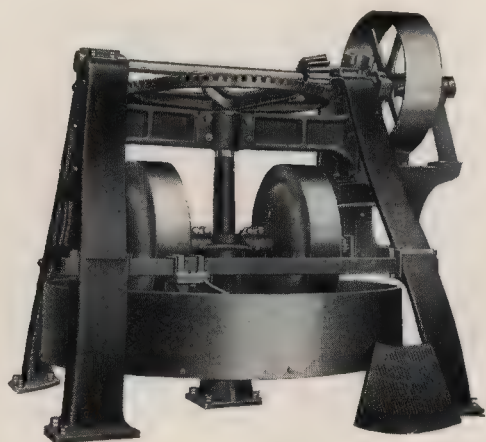
No. 11 Auger Machine



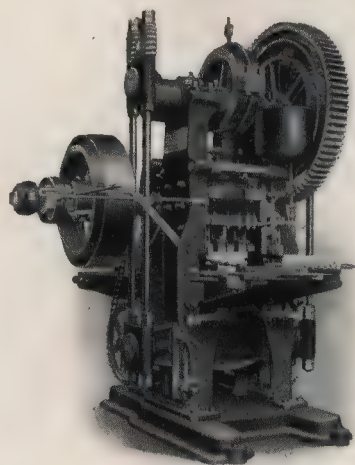
10-foot Pugmill



No. 20 Hollow-Ware Machine



9-foot Dry Pan



Canton Repress

**THE BONNOT COMPANY**  
CANTON, OHIO



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BRICK MACHINES  
*and*  
PUG MILLS

BULLETIN "AP"

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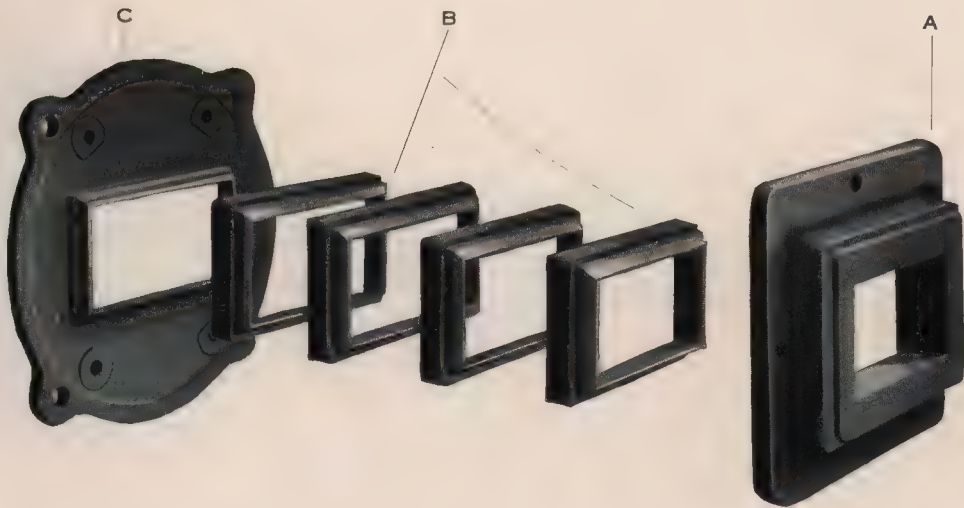
CANTON, OHIO

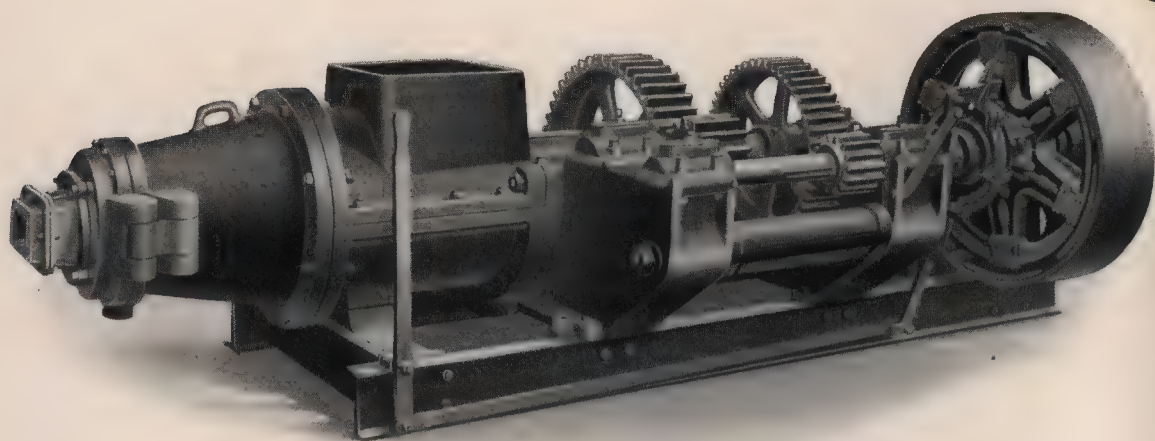
*211 Higgins Building, Los Angeles, Cal.*



## Bonnot Brick Dies

**B**ONNOT BRICK DIES consist of mouth piece, "A," four liners or frames, "B," and back plate, "C." The mouth piece casting has chilled iron liner, ground to exact size and leaded into the mouth piece casting. The frames are carefully fitted to give the right taper and proper fit to allow for lubrication. The back plate attaches to the nozzle of the machine and completed die is held in position in a cast iron case. When renewing die, the parts "A," "B" and "C" are all that are required. These dies are all arranged for Steam and Hot-Water lubrication.





## No. 19 Auger Brick Machine

### SUB-BASE

Two 10-inch I-beams extend the full length of the machine, provided with cast stretcher at the front end and cross section of I-beams at rear. The cross beams at rear carry the outside support for pulley shaft, making an entirely self-contained machine.

### FRAME

The frame is our standard two-piece construction, joined by heavy cast stretchers each reinforced by 2½-inch steel rods, making a frame which is practically unbreakable yet very accessible. The front frame contains the collared thrust bearing. This is a marine type bearing with seven collars, and experience has shown the superiority of this type of bearing for this service.

### DRUM

The drum and frame are fully machined on all surfaces where they are joined together to insure a perfect fit. Around the shaft at the back of drum, space is provided for any clay that works back so that it will drop down and not get into the bearing. The drum is 26-inch inside diameter, hopper opening on the top for clay is 24-inch square.



**NOZZLE**

The nozzle is machined at all joints and has hinged extension fitted with safety bolt. It is lined with ribbed liners of hard iron made in sections for convenience in renewing.

**SHAFTING**

The main shaft is a steel forging 6-inches in diameter, made hexagon where it carries the auger and knives. Intermediate and countershafts are 5-inch and 4-inch diameter, respectively.

**GEARS**

The entire set of gears is cast steel. Gearing of this kind is almost unbreakable and will give the greatest amount of service. The main gear is 10-inch face,  $2\frac{3}{4}$ -inch pitch; intermediate gear, 8-inch face, 2-inch pitch; regular gear ratio 13 to 1; also furnished 10 to 1. A sheet steel cover is provided to protect the gearing.

**BEARINGS**

Bearings for main shaft are 19-inches and 20-inches in length. Those for counter and intermediate are  $13\frac{1}{2}$ -inches long. The bearings are poured from a special mixture of babbit made to our own formula.

**PULLEY**

Machine is fitted with our standard six-arm friction clutch pulley, 48-inch diameter, 14-inch face, bronze bushed and well crowned. Speed 190 to 210 R. P. M.

**AUGER**

The auger and knives are made of a special mixture of hard iron. Standard size of auger for this machine is 21-inch diameter.

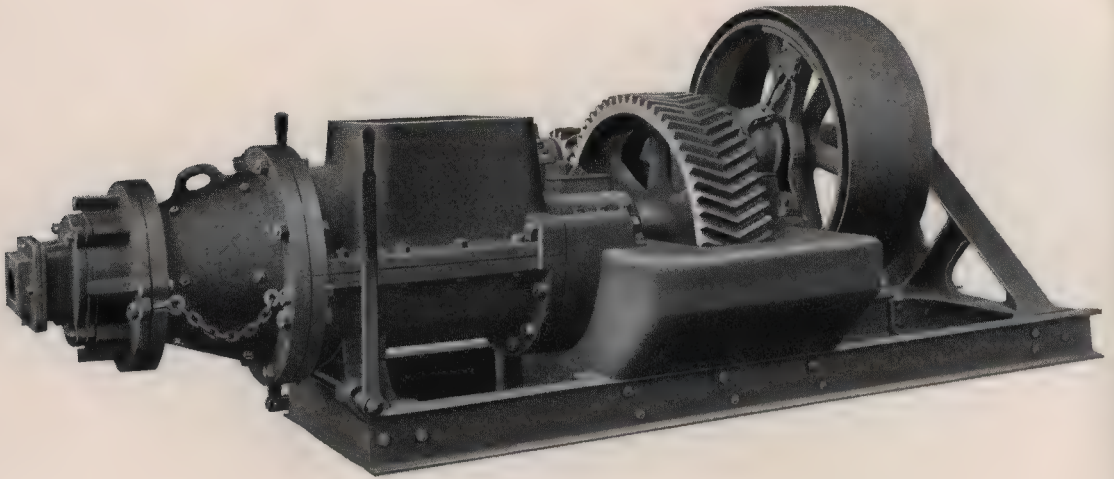
**DIMENSIONS**

Over all dimensions are as follows:

Length . . . . .	16 feet, 2 inches
Width . . . . .	8 feet, 6 inches
Height . . . . .	5 feet, 3 inches
Weight . . . . .	21,000 pounds

**CAPACITY**

7,500 to 12,500 standard brick per hour.



## No. 18 Auger Brick Machine

### SUB-BASE

The Sub-Base on which this machine is carried consists of two 8-inch I-beams extending the full length of the machine and substantially braced at each end. The outside support for the pulley shaft is carried on this frame and the machine is entirely self-contained.

### FRAME

The frame is a one-piece casting so arranged as to provide a reservoir for oil in the base of the casting, so that the gearing may be run in oil if desired. The frame has a machined joint on the front side where the barrel attaches. The thrust bearing is of the marine type, containing four collars, and is located in the front side of the frame.

### DRUM

The drum and the frame are machined on all surfaces where they are joined together to insure perfect fit. Ample space is provided between the drum and frame so that any clay which works back will drop down and not get into the bearings. The drum is 24-inch inside diameter and the hopper opening on the top for clay is 22 inches square.



## NOZZLE

The nozzle is machined both front and back to insure perfect fit and is provided with hinged extension and safety bolt. It is lined with ribbed liners of hard iron, made up in sections so that they may be conveniently renewed.

## SHAFTING

The main shaft is a steel forging 6 inches in diameter and of hexagon shape where it carries the auger and knives. Countershaft is turned steel, 4½-inch diameter.

## GEARS

Only one set of gearing is used in this machine. It is of the double helical type, sometimes called "Rolling Mill Gears." Gear and pinion are 12-inch effective face made of cast steel and machine moulded to insure accuracy.

## BEARINGS

The thrust bearing on the main shaft is 17 inches in length and the outside bearing is 18 inches. Both bearings for countershaft are 18 inches in length and all bearings are poured from our standard mixture of babbitt made to our own formula.

## PULLEY

The machine is supplied with our 54-inch x 18-inch friction clutch pulley of the six-arm design. It is bronze bushed and face well crowned, speed being 120 R. P. M.

## AUGER

The knives and propeller are of our special mixture of hard iron.

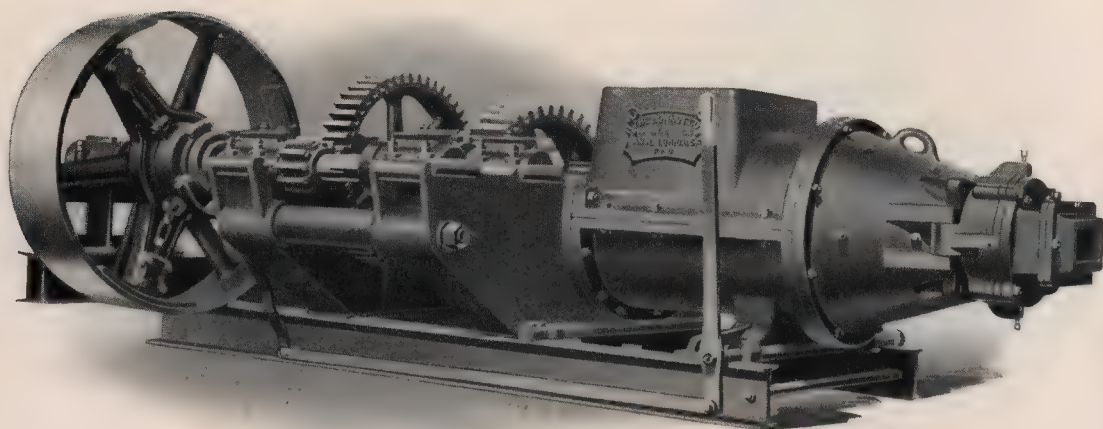
## DIMENSIONS

The overall dimensions are as follows:

Length . . . . .	14 feet, 4 inches
Width . . . . .	6 feet, 10 inches
Height . . . . .	5 feet, 5 inches
Height to top of hopper	3 feet, 11 inches
Weight . . . . .	13,500 pounds

## CAPACITY

Capacity 5,000 to 7,500 standard size building brick per hour.



## No. 10 Auger Brick Machine

### SUB-BASE

Two 8-inch I-beams form the sub-base for this machine, and are securely joined at both ends. The cross beams at the rear provide the support for pulley shaft and make the machine self-contained.

### FRAME

The frame is of very heavy design joined by heavy cast stretchers which are reinforced with 2-inch steel rods. This type of frame has proved very satisfactory. The thrust bearing which is of the marine type is carried in the front frame. It has five collars with a thrust area of 134 square inches.

### DRUM

The drum and the frame of machine have machined joints to insure perfect fitting. Space is provided back of the drum so that any clay which works back cannot fall in the bearing. The diameter of the drum is 24 inches and the opening to receive the clay is 22 inches square.



## NOZZLE

The nozzle is made with machined joints and lined with hard iron sectional liners to take the wear. A hinged extension and safety bolt are provided as a safety factor.

## SHAFTING

The auger shaft is a forging 6-inch diameter and made hexagon where it carries the propeller and knives. The intermediate shaft is 4½-inch, and countershaft 4-inch. Both are turned steel.

## GEARS

All gearing used on this machine is cast steel. The main gear is 8-inch face, 2¾-inch pitch, and intermediate gearing is 6-inch face and 2-inch pitch. The gear ratio is 13 to 1. A sheet metal cover is provided to protect the gears.

## BEARINGS

The bearings for the main shaft and intermediate shaft are 14 inches long and for the countershaft 16½ inches long. All bearings are poured from metal made to our standard formula.

## PULLEY

The pulley has friction clutch of the three-arm type. It is 48-inch diameter, 12-inch face, bronze bushed and well crowned. Speed is 225 to 275 R. P. M.

## AUGER

The knives and propeller are of our special mixture of hard iron.

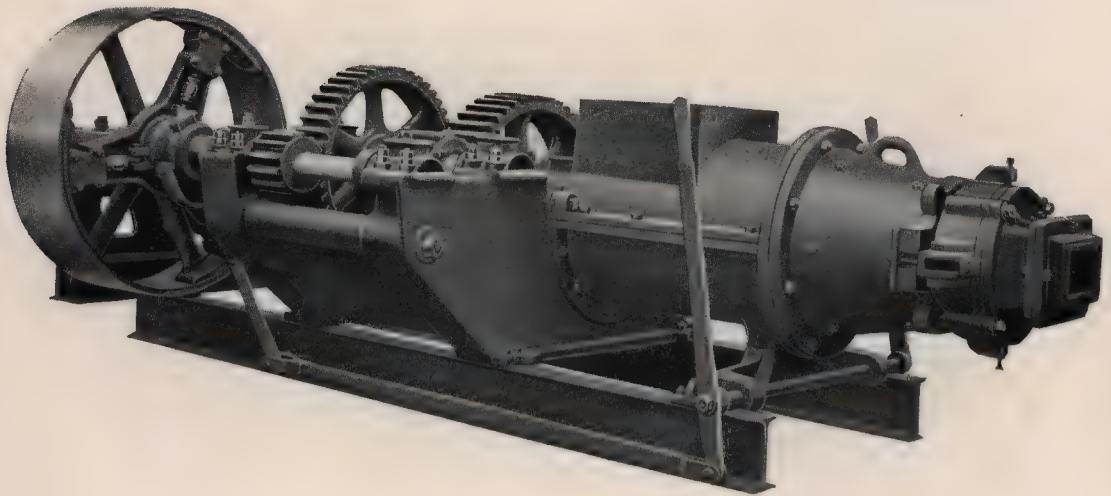
## DIMENSIONS

The over all dimensions are as follows:

Length . . . .	13 feet, 3 inches
Width . . . .	7 feet, 8 inches
Height . . . .	5 feet, 5 inches
Height to top of hopper	3 feet, 11 inches
Weight . . . .	14,500 pounds

## CAPACITY

Capacity 5,000 to 7,500 standard size building brick per hour.



## No. 8 Auger Brick Machine

### SUB-BASE

Two 7-inch I-beams extend the full length of the machine, braced with substantial cast cross section in front and short section of steel beams at the rear. The cross beam at the rear forms a support for the outside bearing of pulley shaft, thus making the machine entirely self-contained.

### FRAME

The main frame of the machine is a two-piece casting of our standard design, joined by heavy cast stretchers reinforced with  $1\frac{1}{2}$ -inch steel bolts. This type of frame has given very good satisfaction and is particularly accessible when repairs are necessary. The front frame contains the thrust bearing which is a five-collared bearing of the marine type.

### DRUM

The drum and frame are fully machined on all surfaces where they are joined together and thus make a perfect fit. Space is provided back of drum so that any clay which works back can not get into bearings. The drum is 20-inch inside diameter and the hopper opening on top for receiving the clay is 18 inches square.



## NOZZLE

The nozzle is machined on all joints and is provided with hinged extension and safety bolt. Ribbed liners of hard iron are supplied and are made in sections for convenience in repairing.

## SHAFTING

The main shaft is 5-inch steel forging made hexagon where it carries the propeller and knives. The intermediate shaft and countershaft are turned steel 4 inches and 3 inches, respectively, in diameter.

## GEARS

The entire set of gears are of cast steel. The main gear has 8-inch face, 2-inch pitch. The intermediate gear, 6-inch face,  $1\frac{3}{4}$ -inch pitch. The gear ratio is  $12\frac{1}{2}$  to 1. We provide a sheet steel cover for protecting gears from dust.

## BEARINGS

Bearings for the main shaft are 12 inches in length and those for countershaft and intermediate shaft 10 inches. All the bearings are poured from our standard mixture of babbitt.

## PULLEY

Pulley is a three-arm friction clutch, 40 inches in diameter, 12-inch face. It is bronze bushed and well crowned. Speed 200 to 250 R. P. M.

## AUGER

Both auger and knives are made of special mixture of hard iron, which gives greatest amount of wear consistent with necessary strength of material.

## DIMENSIONS

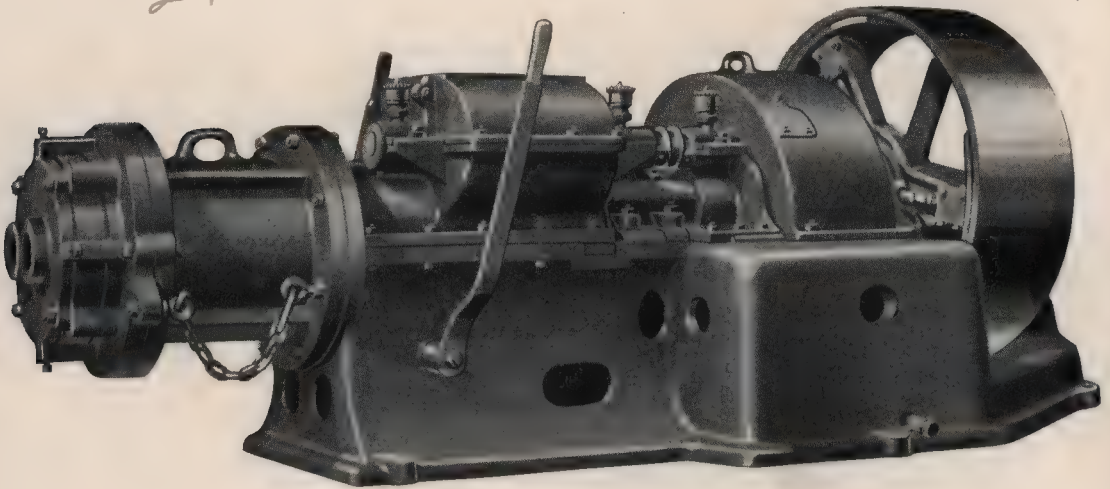
The over all dimensions are as follows:

Length . . . . .	11 feet, 10 inches
Width . . . . .	6 feet, 5 inches
Height over all . . . .	4 feet, 4 inches
Height to top of hopper	3 feet, 5 inches
Weight of machine . . .	8,500 pounds

## CAPACITY

2,500 to 4,000 standard size brick per hour.

\$ 2100.00



## No. 21 Hollow Ware Machine

### BASE AND FRAME

This machine is constructed with the cast iron bed plate and the main frame in one piece. This makes a very rigid construction and insures proper alignment. An oil reservoir in which the gears turn is part of this casting.

### DRUM AND NOZZLE

The drum and nozzle are machined on all surfaces where they are joined together and where they attach to the frame. Bushing or liners can be furnished for the drum for diameters of 10-inch, 12-inch and 14-inch. The drum and nozzle are lined with circular or ring liners which can be put in through the front of the machine. Liners are machined on the outside and drum and nozzle are bored on the inside, insuring perfect fit. Force feeder is provided to prevent choking in the feed hopper when clay is sticky. Ample space is allowed back of the drum so that any clay which works back will drop down and not get in the bearings.

### THRUST BEARING

The main thrust bearing is of the self-oiling marine type, having a series of six collars. It is 16 inches in length and is located in the main frame. This bearing is lined with Prize Ribbon metal of the first grade. It has a thrust area of 224 square inches.



## GEARS

All of the gearing on this machine is cut steel. Main gear has 50 teeth and pinion 14 teeth with face of 9 inches and 2-inch pitch. This gear and pinion are arranged to run in oil. Force feed gears are 4-inch face,  $1\frac{1}{8}$ -inch pitch.

## GEAR COVER

A substantial cover encloses all the gearing to protect it against accident and the accumulation of dirt.

## SHAFTING

The main shaft is a steel forging 5-inches in diameter, of hexagon shape where it carries the augers. The countershaft is turned steel shafting  $3\frac{7}{16}$  inches in diameter. Thrust bearing is 16 inches in length, main shaft bearings  $12\frac{1}{2}$ -inches, countershaft bearings 11 inches. All these bearings with the exception of marine thrust are made from a standard mixture made to our own formula.

## PULLEY

Driving pulley is a friction clutch 48 inches in diameter, <sup>16"</sup>~~12~~-inch face. Speed 175 to ~~200~~ R. P. M.  
750 -

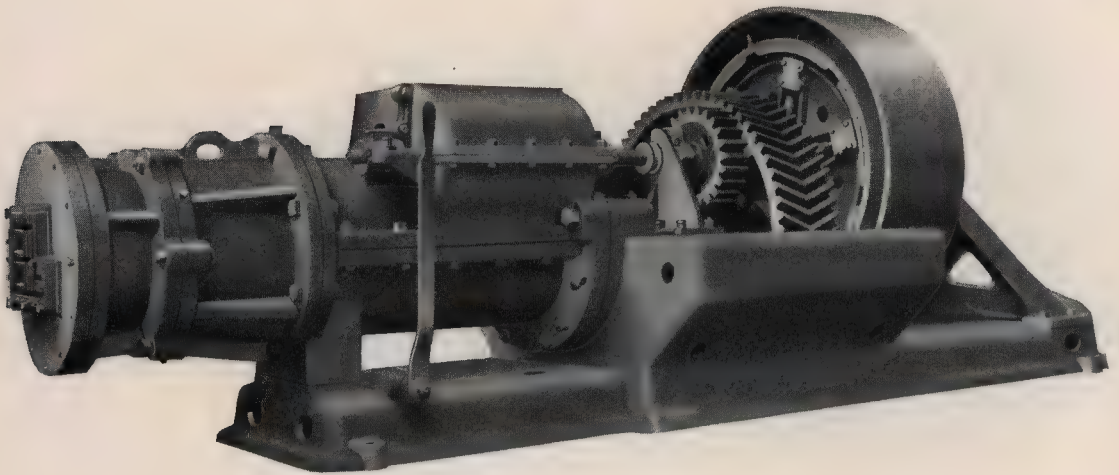
## DIMENSIONS

Length over all	. . .	12 feet, 5 inches
Width over all	. . .	5 feet, 8 inches
Height to top of hopper	3 feet, 6 inches	
Weight	. . .	14,000 pounds

This machine is designed especially for making hollow-ware. We can furnish augers 10-inch, 12-inch and 14-inch diameter, and bushings to accommodate these sizes. It has a capacity of 75 to 125 tons per day, under average conditions. Where it is desired to make both hollow-ware and brick, we can supply necessary parts to adapt the machine to both products.

## NOTE

The No. 21 machine is practically the same as our No. 17 except that it has a number of improvements incorporated in its design.



## No. 20 Hollow Ware Machine

### BASE AND FRAME

The machine is mounted on cast bed plate which extends the entire length of the machine and supports the out-board bearing. The main frame is cast with this bed plate and besides carrying the bearings, has an oil reservoir in which the gears turn. This is the best possible construction, absolutely preventing any part of the machine getting out of alignment.

### THRUST BEARING

Two complete thrust bearings are provided, either one capable of carrying the load. With this arrangement, if one of these bearings becomes heated, through lack of lubrication, the load can be carried on the other one while the cause of the heating is removed. Together, these bearings have thrust area of 445 square inches. They are lined with Prize Ribbon metal of the highest grade.

### DRUM AND NOZZLE

The drum and nozzle are machined on all surfaces, where they are joined together and bored on the inside to insure accurate centering of the liners, which are turned on the outside. With this arrangement a close fit between augers and liners can be obtained and new liners can be put in which will give the same accurate centering. Diameter inside of liners is 18 inches. Ample space is provided between the drum and frame so that any clay which works back will drop down and not get into the bearings. Force feeder is provided to prevent choking in feed hopper.



## AUGERS

Augers 14-inch, 16-inch or 18-inch diameter can be furnished and liners for barrel to suit these sizes.

## GEARS

The machine has a single set of gearing, 12-inch face. These gears will be furnished of cut steel, or of machine moulded steel of the double helical type, sometimes called "Rolling Mill Gears," as preferred.

## GEAR COVER

Substantial steel plate cover is provided, protecting the gears against accident and dirt.

## SHAFTING

The main shaft is a steel forging 6 inches in diameter and hexagon shape where it carries the augers. This shaft is machined all over. The hexagon end is milled to insure accurate fitting of the augers on the shaft. The countershaft is the best grade of turned steel shafting 4-7/16-inch diameter. Bearing for main shaft is 18 inches long and those for countershaft the same. These bearings, with the exception of the marine thrust are all poured with our standard mixture of babbitt, made from our own formula.

## PULLEY

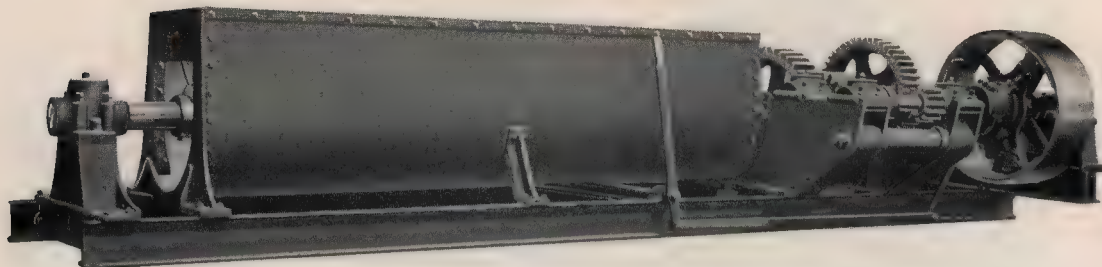
The driving pulley is our 60-inch x 20½-inch friction clutch pulley of six-arm design. It is bronze bushed and the face is well crowned. Speed 140 R. P. M.

## DIMENSIONS

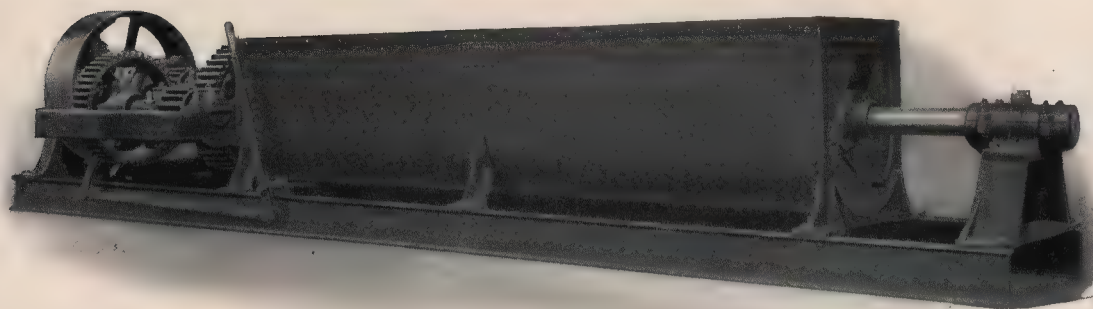
Over all dimensions are approximately as follows:

- Length, 14 feet, 5 inches, not including  
hinged extension and die
- Width over all . . . 7 feet, 2 inches
- Height to top of hopper 4 feet, 0 inches
- Weight, approximately 21,000 pounds

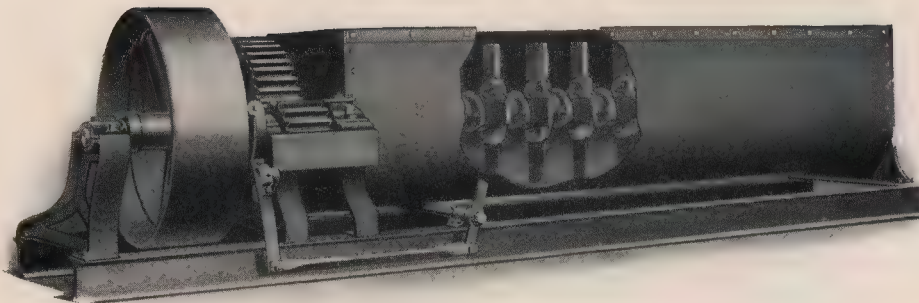
This machine is designed especially for making hollow-ware. We can furnish augers 14-inches, 16-inches and 18-inches diameter and bushings to accommodate these sizes. Under average conditions it has a capacity of from 150 to 200 tons per day. Where it is desired to make both hollow-ware and brick, we can supply the necessary parts to adapt the machine to both products.



STYLE "D" PUG MILL  
Described on Page 49



STYLE "C" PUG MILL  
Described on Page 50



STYLE "B" SINGLE GEARED PUG MILL  
Described on Page 51



## Style "D" Pug Mill

Illustrated on Page 48

### SUB-BASE

This machine is carried on two 8-inch steel beams forming the sub-base and extending entire length including the outer bearing for driving shaft.

### FRAME

The main frame is our standard two-piece design joined by heavy cast stretchers which are reinforced with steel rods.

### GEARS

This machine is double geared, all gearing being cut steel. The main gears are 8-inch face,  $2\frac{3}{4}$ -inch pitch; intermediate gears, 6-inch face, 2-inch pitch. Gear ratio is 13 to 1. Suitable cast iron covers are provided which thoroughly protect the gearing from dirt.

### BEARINGS

The thrust bearing is of the marine type, being the same design as used on our brick machines. An outside bearing is provided at the discharge end of the mill for carrying the main shaft and this bearing is entirely out of the clay. Length of main shaft bearings, 12 inches and  $13\frac{1}{2}$  inches, respectively; intermediate  $12\frac{1}{4}$  inches, and countershaft 12 inches.

### SHAFTING

The main shaft is 6 inches in diameter, intermediate  $4\frac{1}{2}$  inches, and countershaft 4 inches. Main shaft is of steel forging and the others are turned steel.

### SHELL AND HUBS

The shell of the mill is 30 inches in diameter, 12 feet long, made of  $\frac{1}{4}$ -inch steel plate reinforced along the top with angle iron. The hubs are of the interlocking type and any hub or knife may be changed independently of the others.

### PULLEY

The driving pulley is a three-arm friction clutch 40-inch diameter x 12-inch face. It is provided with bronze bushing and the face is well crowned. Speed 240 R. P. M.

### DIMENSIONS

The over all dimensions are as follows:

Length . . . .	22 feet, 5 inches
Width . . . .	7 feet, 3 inches
Height . . . .	4 feet, 3 inches
Weight . . . .	16,000 pounds

### CAPACITY

Capacity 10,000 to 15,000 brick per hour.

### NOTE

This machine can be furnished of the pull type to discharge at gear end if desired.

## Style "C" Pug Mill

Illustrated on Page 48

### SUB-BASE

The sub-base consists of two 7-inch steel beams extending the full length and carrying the outer bearing for driving pulley.

### FRAME

The frame is of the box type with suitable cast iron supports attached to the sub-base.

### GEARS

This mill will be furnished with either C. S. gearing or cast steel gearing, as customer may prefer. The main gears are 8-inch face,  $2\frac{3}{4}$ -inch pitch, and intermediate gears, 6-inch face, 2-inch pitch. Sheet metal cover can be furnished for gears on this machine if ordered, but will be extra.

### BEARINGS

The thrust bearing is our standard design of marine or collared thrust, located in the front frame. Length of bearings for main shaft,  $6\frac{1}{2}$  inches,  $7\frac{1}{2}$  inches and 13 inches, respectively, intermediate and countershaft,  $7\frac{1}{4}$  inches.

This mill can be furnished with the bearing for discharge end either in the discharge head or extended on frame as preferred.

### SHAFTING

The main shaft is  $4\frac{1}{2}$ -inch diameter, intermediate shaft,  $3\frac{1}{2}$ -inch, and countershaft, 3-inch diameter.

### SHELL AND HUB

Shell of mill is 30-inch diameter, 12 feet long, made of  $\frac{1}{4}$ -inch steel plate reinforced along the top with angle iron.

The hubs are of the interlocking type, and any hub or knife may be changed independently of the others.

### PULLEY

The pulley is three-arm friction clutch, 36-inch diameter, 14-inch face, with bronze bushing and face well crowned. Speed 245 R. P. M.

### DIMENSIONS

Length over all	.	.	22 feet
Width	.	.	5 feet, 4 inches
Height	.	.	3 feet, 11 inches
Weight	.	.	10,500 pounds

### CAPACITY

Capacity is 5,000 to 7,500 brick per hour.



## Style "B" Pug Mill

Illustrated on Page 48

### SUB-BASE

Two 6-inch steel beams form the sub-base for this machine, extending the full length and carrying the outer bearing for driving pulley.

### FRAME

The frame is of box type with suitable cast iron supports attached to the sub-base.

### GEARS

This machine is single geared, gears being 7-inch face; driving pinion is of steel. Gear ratio is 5 to 1. Sheet metal cover will be provided for gears if ordered, but will be extra.

### BEARINGS

Regular design of collared or marine thrust bearing is used on this mill. Bearings for main shaft are  $7\frac{3}{4}$  inches, 9 inches and  $7\frac{1}{4}$  inches, respectively, countershaft bearings,  $7\frac{1}{4}$  inches long.

### SHAFTING

Main shaft is  $4\frac{1}{2}$ -inch diameter, and countershaft 3-inch; both of turned steel.

### SHELL AND HUB

The shell is 28 inches in diameter, 10 feet long, made of  $\frac{1}{4}$ -inch plate and reinforced with angle irons along the top.

The hubs are of the interlocking type, and any hub or knife may be changed independently of the others.

### PULLEY

Friction clutch pulley, 40-inch diameter, 12-inch face, of three-arm design is used. Speed 115 R. P. M.

### DIMENSIONS

Length of mill . . . .	15 feet, 4 inches
Width . . . . .	5 feet, 5 inches
Height . . . . .	4 feet
Weight . . . . .	7,500 pounds

### CAPACITY

2,000 to 3,500 brick per hour.

## Style "E" Pug Mill

Illustrated on Page 54

### SUB-BASE

This machine is carried on two 8-inch steel beams forming the sub-base and extending the full length of the machine, including the outside bearing for the pulley shaft.

### FRAME

The main frame is a one-piece casting, similar in general design to brick machine frame. It is arranged with oil tight pan in the bottom.

### GEARS

This machine is single geared, having 10-inch face gearing; main gear having 61 teeth,  $2\frac{1}{4}$ -inch pitch and pinion 13 teeth. Both gear and pinion are open hearth cast steel, but will be furnished machine cut, if so ordered. Mill is arranged so these gears may be run in oil if desired and suitable cover is provided to protect the gearing from dirt.

### BEARINGS

The thrust bearing is of the marine type and located in the front side of frame. This bearing has five collars and is 12 inches in length. Back bearing for main shaft is 14 inches in length. Both countershaft bearings are also 14 inches long.

An outside bearing is provided at the discharge end of mill carrying the main shaft, and this bearing is entirely out of the clay.

### SHELL AND HUB

The shell of the mill is 30-inch diameter, and standard length is 12 feet. It is made of  $\frac{1}{4}$ -inch plate reinforced on the top with steel angles. Discharge opening is 16 inches x 30 inches.

The hubs are of the interlocking type so that any hub or knife may be changed independently of the others.

### SHAFT

Main shaft of this mill is 5 inches square; the countershaft is 4 inches in diameter, and both are turned steel.

### PULLEY

The driving pulley is three-arm friction clutch, 54-inch diameter,  $14\frac{1}{2}$ -inch face. It is provided with bronze bushing and the face is well crowned. Speed is 132 R. P. M.

### DIMENSIONS

The over all dimensions are as follows:

Length . . . .	21 feet, 6 inches
Width . . . .	7 feet, 1 inch
Height . . . .	5 feet, 4 inches
Weight . . . .	16,000 pounds

### CAPACITY

10,000 to 15,000 brick per hour.



1550-

## Style "G" Pug Mill

Illustrated on Page 54

### SUB-BASE

Machine is mounted on two 7-inch steel beams forming the sub-base and extending entire length of machine, including the outer support for driving shaft.

### FRAME

The main frame is our standard design of one-piece frame, and has oil tight pan bottom.

### GEARS

This mill is furnished with single set of gearing, the gear having 57 teeth, 10-inch face, 2-inch pitch, and pinion 12 teeth. Both gear and pinion are open hearth steel castings. They can be run in oil if desired, and are protected with suitable covers to exclude dirt and dust.

### BEARINGS

The thrust bearing is located in front of frame and has a series of four collars. Length of this bearing is 12 inches. Back bearing for main shaft is 14 inches in length and both countershaft bearings are 12 inches long. An outside bearing is provided at the discharge end of mill carrying the main shaft, and this bearing is entirely out of the clay.

### SHELL AND HUBS

The shell of the mill is  $\frac{1}{4}$ -inch plate, 30 inches in diameter, reinforced on the top with steel angles. Discharge opening is 16 inches x 30 inches. The hubs are of the interlocking type, so that any hub or knife may be changed independently of the others.

### SHAFT

Main shaft is  $4\frac{1}{2}$  inches square, countershaft is  $3\frac{1}{2}$ -inch diameter and both are cold rolled steel.

### PULLEY

The driving pulley is three-arm friction clutch 44-inch diameter,  $12\frac{1}{2}$ -inch face. Pulley is bronze bushed and face is well crowned. Speed is 132 R. P. M.

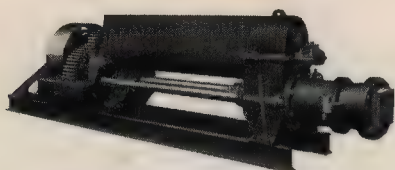
### DIMENSIONS

The over all dimensions are as follows:

Length . . . .	21 feet
Width . . . .	5 feet, 10 inches
Height . . . .	4 feet, 6 inches
Weight . . . .	12,000 pounds

### CAPACITY

6,000 to 9,000 brick per hour.



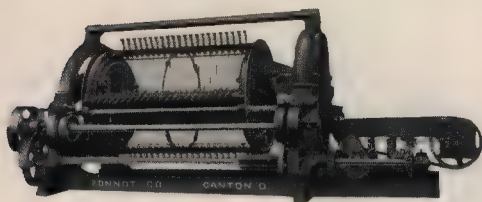
No. 32 Combination Machine



Canton Special Machine



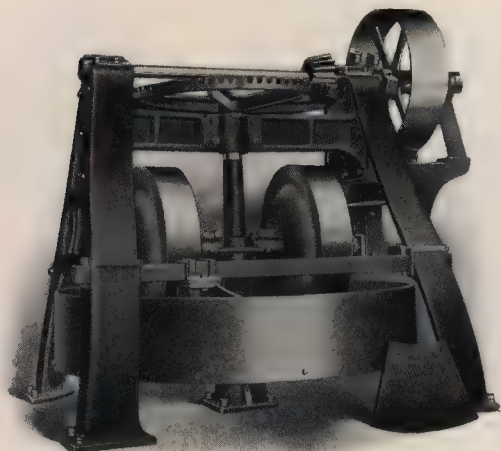
No. 12 Combination Machine



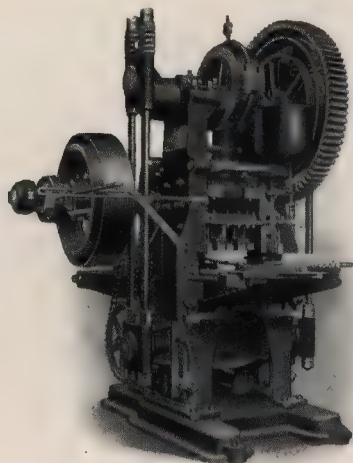
Rotary Automatic Cutting Table



No. 14 Combination Machine



9-Foot Dry Pan



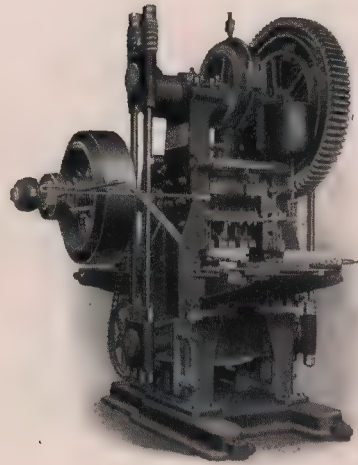
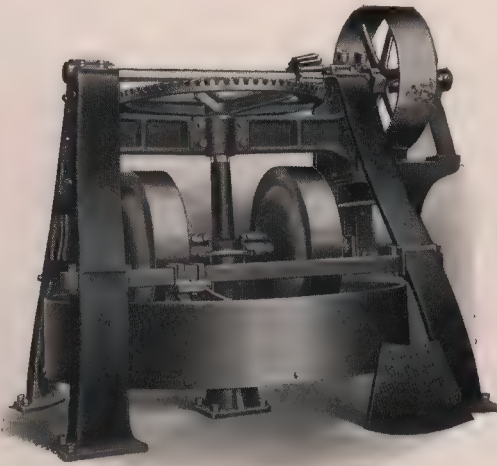
Canton Repress



BULLETIN "DR"

# BONNOT = CANTON

DRY PAN                      REPRESS



WET PANS  
SCREENS  
ELEVATORS  
DISINTEGRATORS  
CARS  
ETC.

THE BONNOT COMPANY  
CANTON, OHIO

BONNOT CLAY WORKING MACHINERY HAS BEEN  
STANDARD  
FOR MORE THAN 25 YEARS

L E T U S

---

STANDARDIZE

---

YOUR PLANT



## CLAY TESTS

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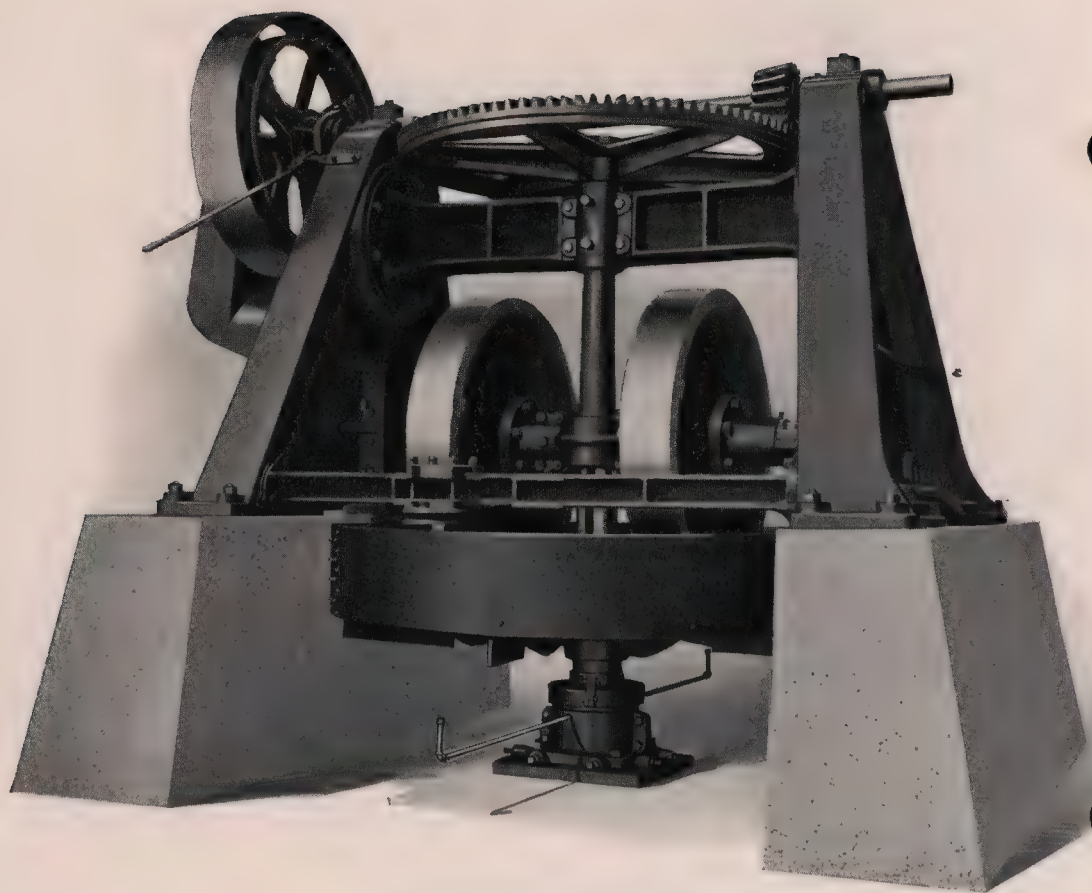
Clays are of such variety and act so differently under the process of forming and burning, that proper tests should be made to decide the fitness of the clay for the proposed product. These tests should be made under actual working conditions so that the results can be duplicated in the proposed plant.

The Bonnot Company is prepared to make tests of this kind for paving brick, building brick, tile and other forms of hollow ware. There is a nominal charge made for this service, but if machinery is afterwards purchased, the payment for the test is applied on the price of the machinery.

Parties for whom these tests are conducted are not only invited to witness the testing of their samples, but we very much recommend that they be present.

In shipping clays for tests care should be taken on the following points, to avoid mistake:

1. Name of shipper should be placed on each package, as well as our name and address.
2. Send promptly full instructions as to kind of tests desired.
3. Prepay freight and send us bill of lading.



**TEN FOOT DRY PAN**

#### **FRAME**

The frame consists of iron housings, heavily ribbed, inclined slightly toward each other. The cross-piece joining these frames has circular ends 32" in diameter, the joints are machined and fastened with eight bolts  $1\frac{1}{4}$ " diameter. This makes a rigid, tight-fitting frame with the minimum amount of jar and vibration. A heavy iron arm or bracket is bolted to the outside of frame for supporting countershaft outside of driving pulley. This bracket is also machined where it joins the frame and fastened to the frame with six  $1\frac{1}{4}$ " bolts.

#### **MULLERS**

The mullers are 62" in diameter with a 10" face. They are made either solid or cored, as may be desired. Tires are 3" thick and dovetail to the muller center at three points.

In addition to this the usual method of rust joint is used for

holding the tire and muller center together. The muller shafts are 5" in diameter, 49" long, and the hubs have 25" bearing on the shafts. The mullers are arranged to operate independently. The slide bearings at the outer ends of these shafts have removable liners of steel, to facilitate renewal.

### SHAFTS AND GEARING

The vertical shaft is a steel forging 10" in diameter at the bottom and 6" at the top. There is a heavy forged shoulder on this shaft on which the pan bottom casting rests. Lower end of shaft is of spherical form giving the effect of a ball joint. Countershaft is 4-7/16" diameter, made of cold rolled steel. The master gear and pinion are steel castings of the following dimensions:

Gear 97T; 8" face; 2 3/4" pitch; 7 1/2" backing. Pinion 16T; 8" face; 2 3/4" pitch; 1" backing. A bronze collar is provided back of pinion.

Pulley 60" x 15"; 190 R. P. M.

### PAN BOTTOM

The bed plate, or bottom, is a steel casting 2 3/8" thick and reinforced with ten heavy ribs underneath. This casting is machined where the arms are attached for carrying screen plates. Each arm is fastened to bed plate by three 1 1/4" bolts. Wearing plates are 2 1/2" thick, each fastened to the bedplate by two 1 1/4" plow bolts. Five of these plates are used. The screen plates, or grates are of the two-piece type, one segment fitting outside of the other. Ten of each are required for a set. Each segment is secured to the arms by two 1 1/4" plow bolts. The rim of pan is steel plate 18" in height and 1/4" thick.

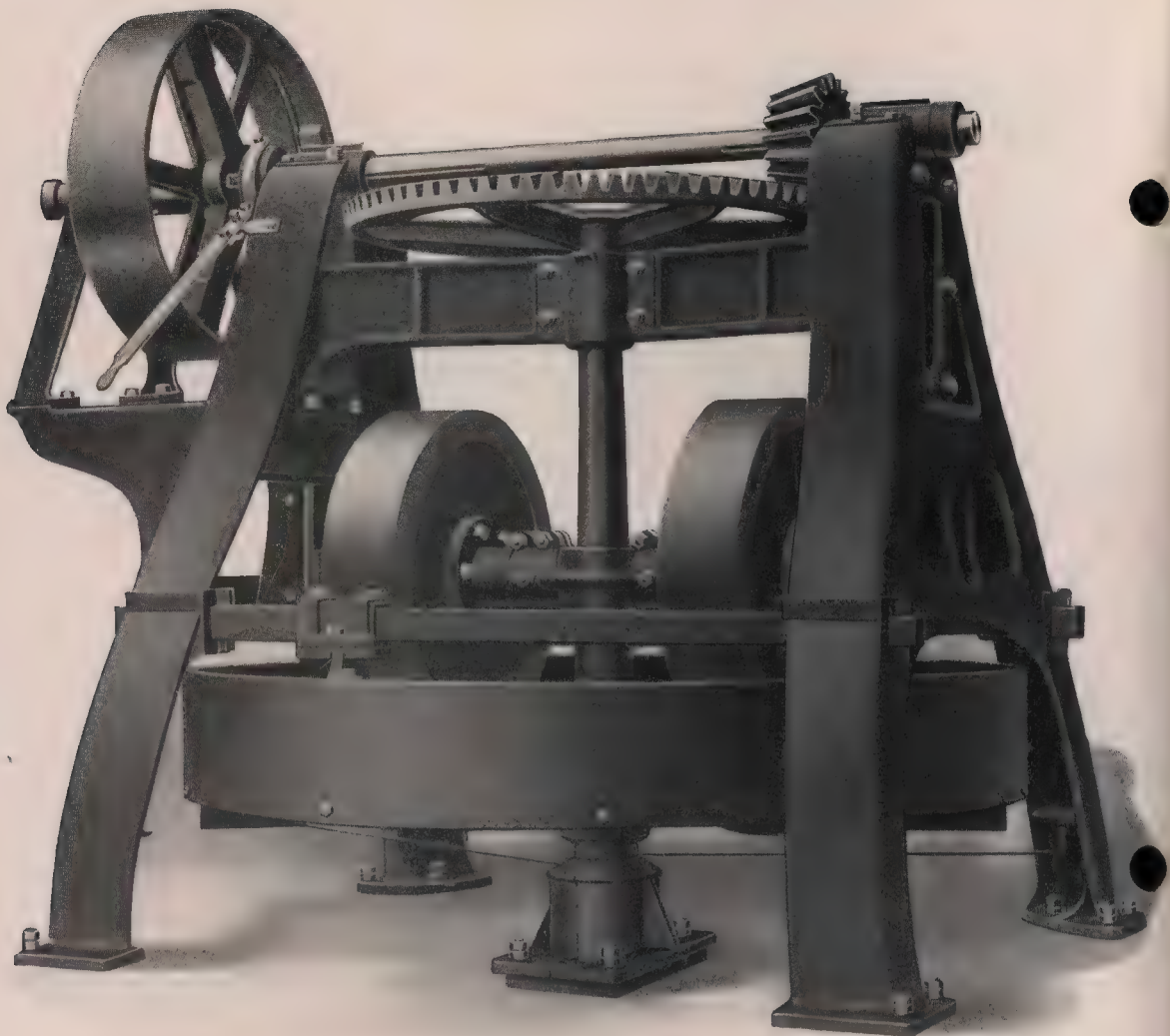
### PLOWS AND CROSS RAILS

The cross rails are steel castings 6" in diameter. The rails are machined on the ends where they join to main frame. The plows are attached to these rails by swivels which permit of adjusting them. Slotted holes are used so that the adjustment is both vertical and horizontal. A separate point of special hard metal is attached to the plow at the point of greatest wear.

### STEP BEARING

Our standard design of step bearing is used in this pan. Illustration and detailed description will be found on page 9. In this pan the step bearing is 14" in diameter.





## NINE-FOOT DRY PAN

### FRAME

Heavily ribbed iron housings inclined slightly toward each other form the frame of this machine. A heavy cross-piece is used having rectangular ends 1' 5" x 2' 6". It is fastened to the frame at either end by six  $1\frac{1}{4}$ " bolts. The counter shaft is supported outside of driving pulley by a heavy iron bracket attached to frame. All frame joints are carefully machined and fitted, insuring a substantial and durable frame. This is of great importance because of the severe strain to which machinery of this type is submitted.

### MULLERS

The standard mullers for this machine are 46" diameter and have 10" face.

Tires are 3" thick and interlock with mullers at three points. Tire and muller center are also held together by the rust-joint method. The muller shafts are 4" diameter and 3' 6" long and the hubs have 22" bearing on the shafts. The mullers are designed to operate separately. At the outer end of the shafts are slide bearings which have removable liners. This greatly simplifies their renewal when necessary.

### GEARS AND SHAFTS

The main shaft is a steel forging 8" diameter at the bottom and 6" at the top. It has a heavy forged shoulder on which the pan bottom casting rests. The lower end of shaft practically forms a ball joint being spherical in shape. The countershaft is 4" in diameter and is made of cold rolled steel. The master gear and pinion are of the following dimensions:

Gear	-----76T.	7 $\frac{1}{2}$ "	F.	2 $\frac{3}{4}$ "	P.	6 $\frac{7}{8}$ "	backing.
Pinion	-----17T.	7 $\frac{1}{2}$ "	F.	2 $\frac{3}{4}$ "	P.	3 $\frac{3}{8}$ "	backing.

The main gear is made with rim separate from the arms or spider. This saves removing the spider from the shaft when renewing the gear. They are joined by machined surfaces and fastened with 12 1 $\frac{1}{8}$ " turned bolts. These rims are all machined to guage and fully interchangeable.

Pulley 48" x 12" 142 R. P. M.

### PAN BOTTOM

The pan bottom is made of heavy cast iron reinforced by ten ribs 2 $\frac{1}{8}$ " wide. Arms for carrying screen plates have machined joints with three plow bolts 1" x 5 $\frac{1}{4}$ " with double nuts. Wearing plates are 2" thick attached to bed plate by two 1" x 4 $\frac{3}{4}$ " plow bolts, with one full and one lock nut. Five plates are used. The segments are made in one piece, ten grates forming a set. The rim of pan is steel plate 16" high,  $\frac{1}{4}$ " thick.

### PLOWS AND CROSS RAILS

Cross rails are wrot iron 3" square. Swivels are used to join plows to cross rails. This permits of adjustment in any direction desired. Plow point of hard iron is used at place of greatest wear.

### STEP BEARING

In this pan, the step bearing is 12" in diameter. Our standard step bearing is used, as described on page 9.



## SEVEN-FOOT DRY PAN

This size dry pan is constructed along the same general lines as the larger models, but is correspondingly lighter in weight throughout.

### FRAME

The frame, although lighter, is so constructed as to reduce vibration and jar to a minimum.

### MULLERS

The mullers are 38" diameter and have 7" face. Muller shafts are 4" in diameter and 35" long. The standard pattern of slide box is used. The mullers have 14" bearing on muller shaft.

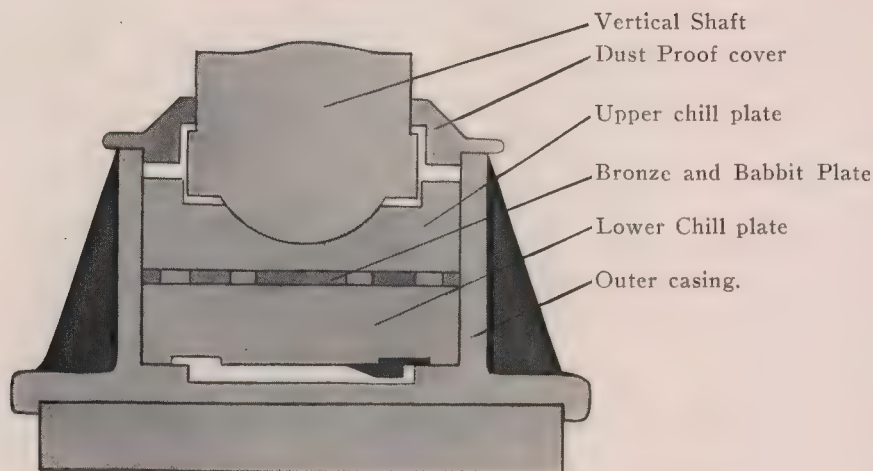
### SHAFTS AND GEARING

Vertical shaft is 76" long and 6" diameter at bottom, 5" at top. Counter shaft is 3" in diameter. Master gear and pinion are of the following dimensions:

Gear 66T;  $4\frac{1}{2}$ " F. 2" P; Pinion 16T  $4\frac{1}{2}$ " F 2" P.

Driving pulley—40x10" friction pulley; 150 R. P. M.





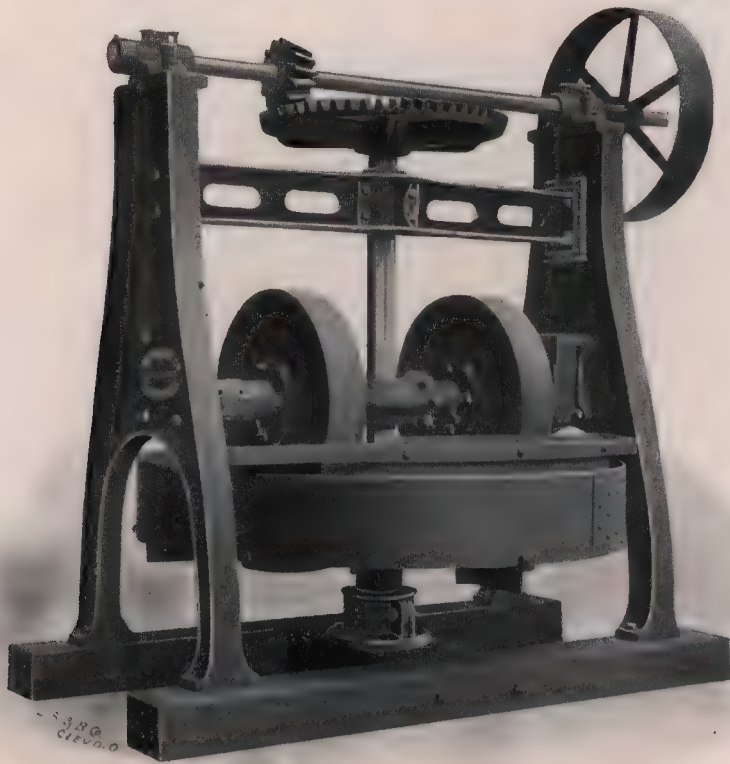
SECTIONAL VIEW DRY PAN STEP BEARING

### STEP BEARING

The cut shows the standard Bonnot Step Bearing with which all our pans are equipped. The outer casing is made in two pieces with machined joint and packed to hold oil. Polished chilled iron plate is placed in bottom of casing and smaller plate having socket to receive end of vertical shaft forms toe and revolves with shaft. A phosphor bronze plate, with suitable oil grooves is placed between the two polished chilled plates. The step is made dust tight by a close fitting cover around the shaft. The bearing is easily lubricated by means of oil pipe from outside of pan.

### NINE-FOOT HEAVY DUTY DRY PAN

We also manufacture a 9' Heavy Duty Pan illustrated on page 11. This pan has 52" x 10" mullers, cast steel bed plate, and the remainder of the pan is proportionately heavier.



### FIVE-FOOT DRY PAN

This is a well-made small size dry pan suitable for a general line of grinding where large capacity is not required. The design is similar to the larger Bonnot Dry Pans. While of lighter construction, it is amply heavy to insure stability.

The mullers are 28" diameter and have 5" face. Muller shafts are 2½" in diameter and 22" long, hubs with 13" bearing on shaft.

Vertical shaft is 62" long and 4" diameter. Counter shaft is 2½" diameter.

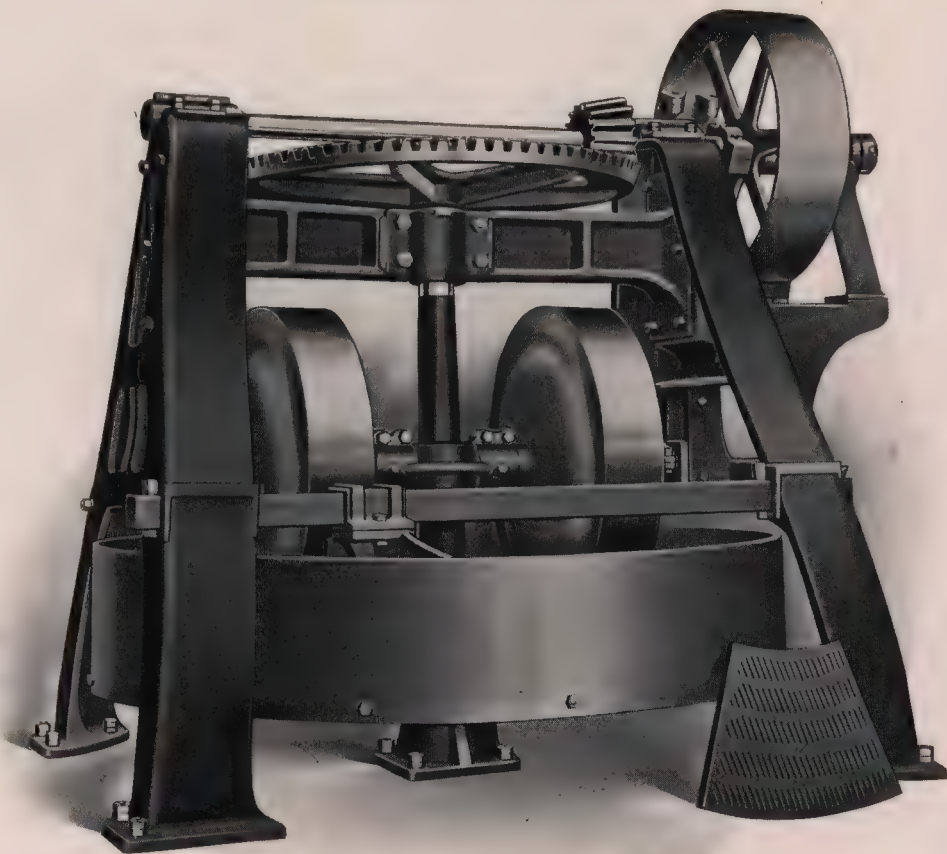
Master Gear 54T. 4" F. 1⅞" P. 4½" backing.

Pinion 14T. 4" F. 1⅞" P. ¾" backing.

Pulley 30" x 6". Speed 150 R. P. M.

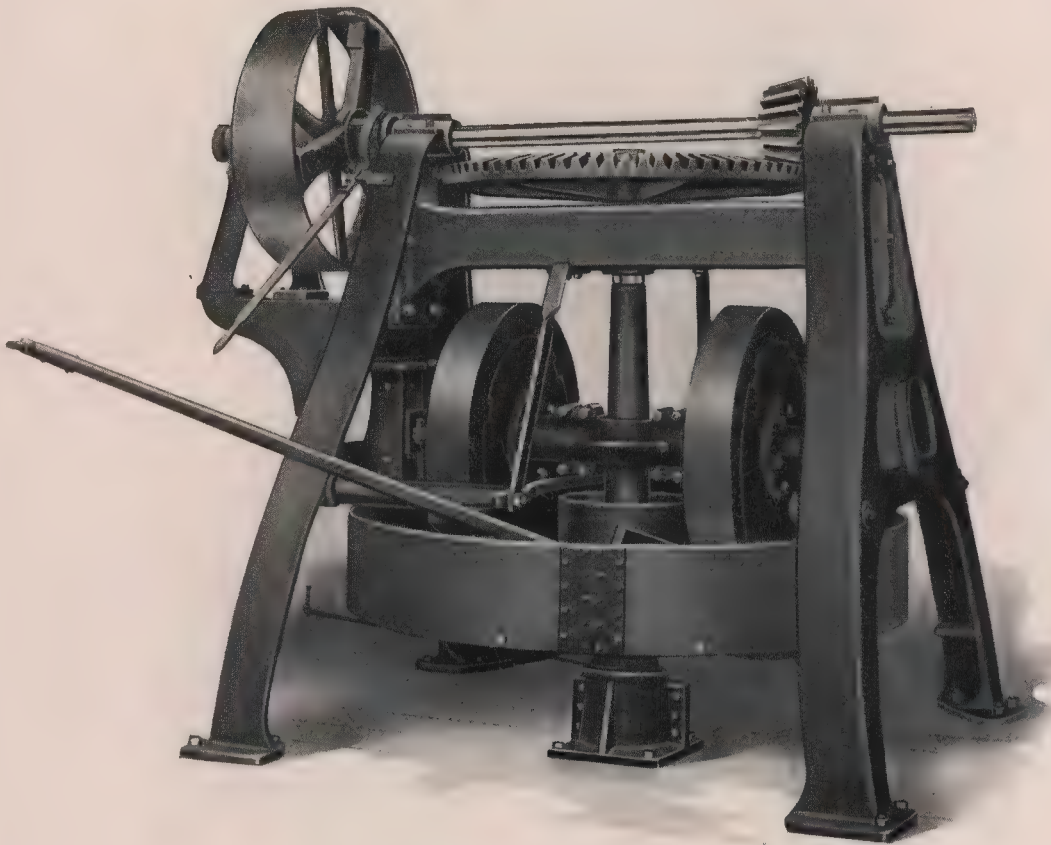


BONNOT TWO-PIECE DRY PAN SCREEN PLATE



BONNOT NINE-FOOT HEAVY DUTY DRY PAN





### EIGHT-FOOT WET PAN

The Wet Pan is designed for the tempering of clay or shale and the grinding of wet, sticky clays.

Its general construction is somewhat similar to the dry pan. The mullers in the wet pan are narrower as a rule than those used in a dry pan, and the pan bottom is made of solid plates. The pan can be emptied while in motion by means of a large scoop fastened on a swivel.

All the essential points in the construction of our other pans are maintained in the wet pan.

Friction clutch pulley for driving, 48" x 12".

Speed of driving pulley, 142 R. P. M.

## CANTON REPRESS

The Canton Repress is constructed with a substantial frame mounted on suitable iron sub-base. It is compact in design, but so arranged as to make all wearing parts easily accessible.

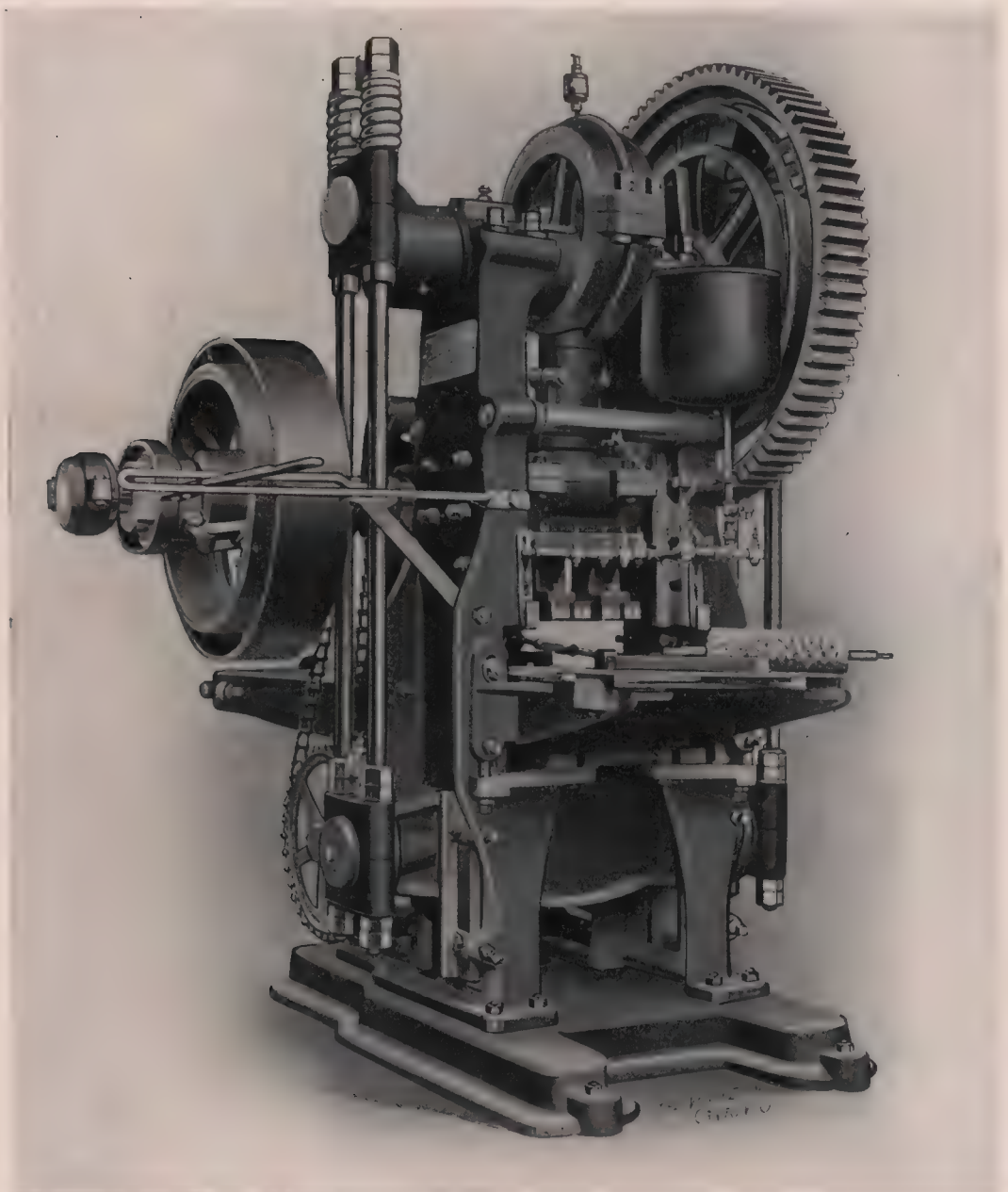
The pressure is exerted by an eccentric on the main shaft. This eccentric is 16" in diameter and 6" face, and the main shaft is 5" in diameter. The strain of pressing does not come on the frame of the machine, but is taken on the steel side rods, which have tempered steel springs as a means of relief. The movement of the press is continuous, and absolutely free from jolt or jar. The pressure is easily and conveniently regulated by a nut with right and left hand thread, immediately above the upper cross head.

All the wearing parts are above the die. The guides for the cross-head are V-shaped, and arranged to take up the wear. The feeding table is furnished with either side feed table or over-feed design. The die box is lined with chilled iron liners which are held without the use of rivets. We have found chilled iron will greatly outlast any other material for this purpose. This material is so hard that it cannot be machined and it is necessary to grind it to size.

Machine is driven with friction clutch pulley 28" in diameter, 6" face, speed 130 R. P. M.

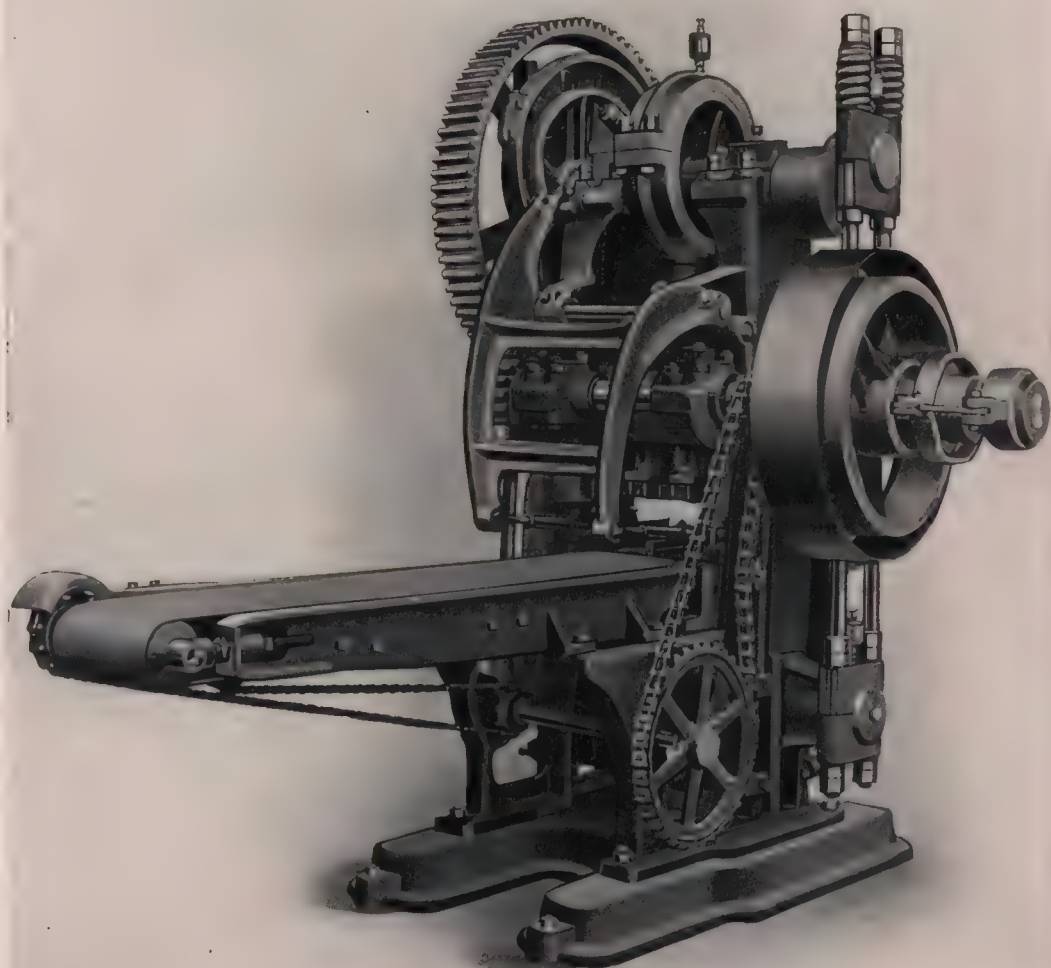
Capacity of Repress 20,000 to 25,000 per day.

Length, with regular 4' 0" off bearing belt, 7' 3"; width over all 5' 7".

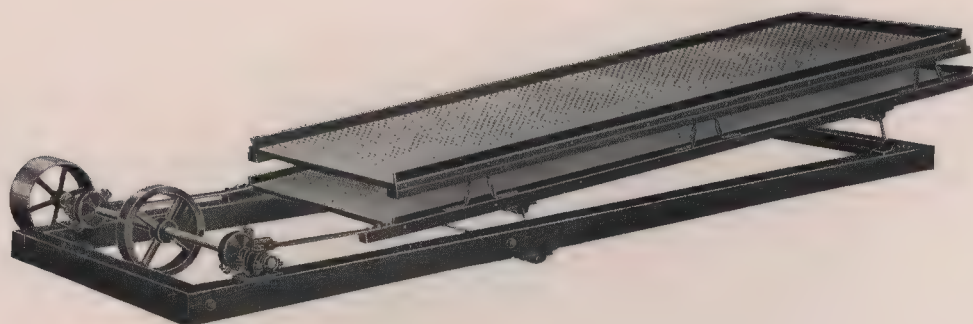


CANTON REPRESS—FRONT VIEW

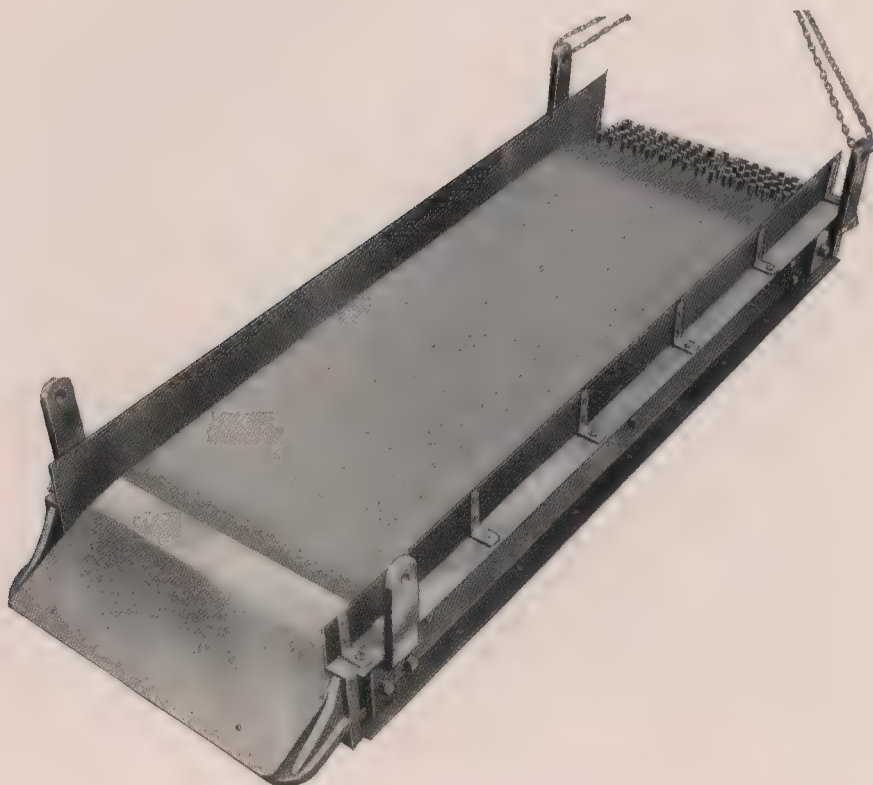




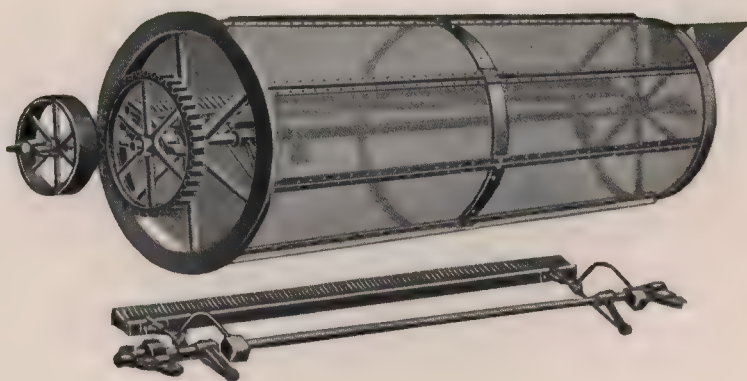
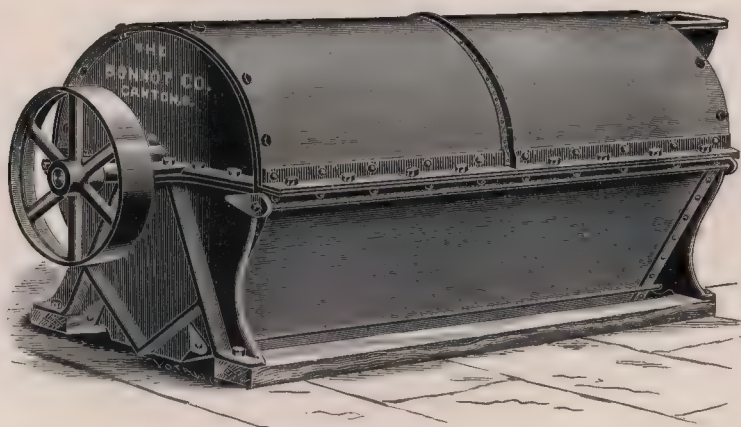
CANTON REPRESS—REAR VIEW



BONNOT ROCKING INCLINED SCREEN



BONNOT PIANO WIRE SCREEN

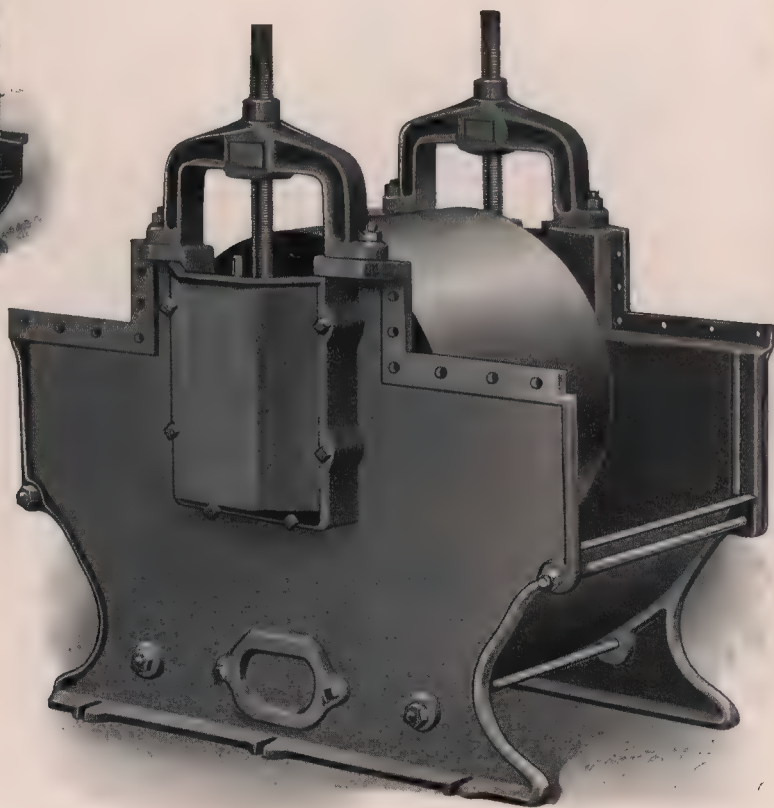


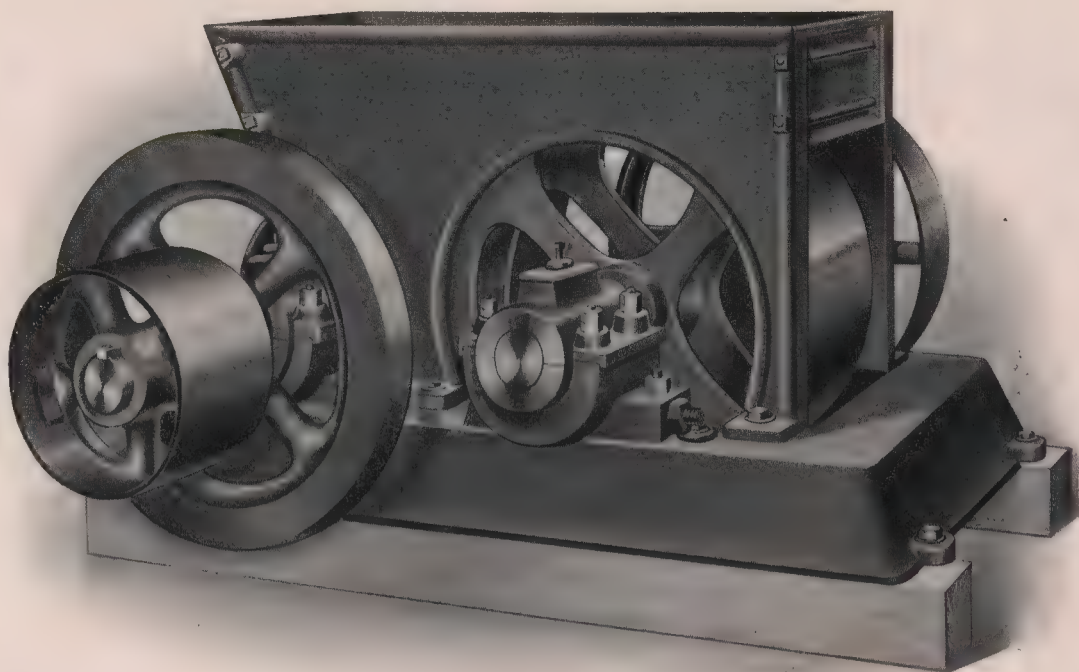
BONNOT ROTARY SCREEN





BONNOT  
ELEVATOR  
AND BOOT





### BONNOT DISINTEGRATER

The Bonnot Disintegrater consists of two large cast rolls having chilled surfaces. The feed roll is 24 inches in diameter and has a smooth surface. The high speed roll is 12 inches in diameter and into the surface of this roll six hard steel bars are fitted for cutting clay. These bars are reversible so that both sides can be worn.

Shafts of machine are 3 inches in diameter and the journal boxes are of the ring oiling type. The high speed roll is perfectly balanced and the shaft fitted with a heavy balance wheel.

Specifications—Style "P" No. 2:—

Floor space, 4' 6" x 2' 9" x 2' 4" high.

Drive pulley, 12" dia., 8" face.

900 R. P. M.

Drive pulley on 24" roll, 30" dia. 6" face.

40-50 R. P. M.

Weight, 3000 lbs.

Specifications Style "P" No. 3:—

Floor space 4' 6" x 3' 2" x 2' 4" high.

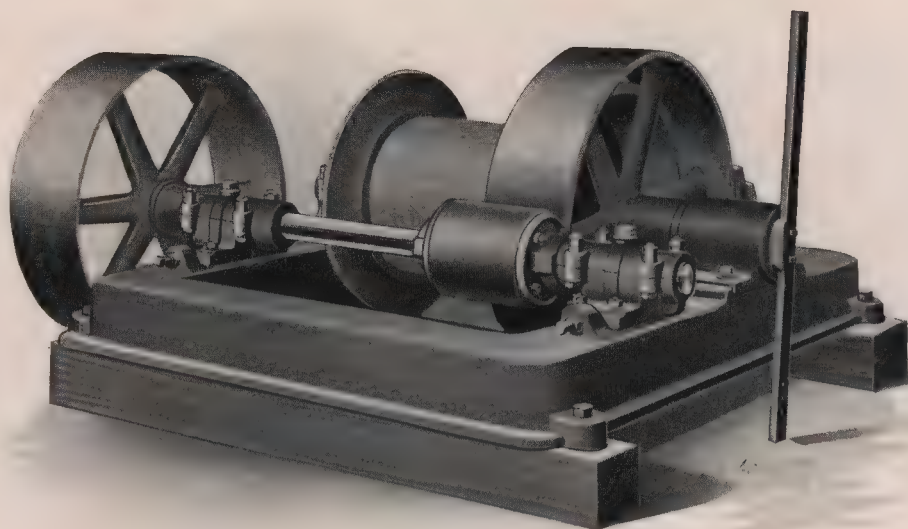
Drive pulley, 16" dia. 10" face.

900-1000 R. P. M.

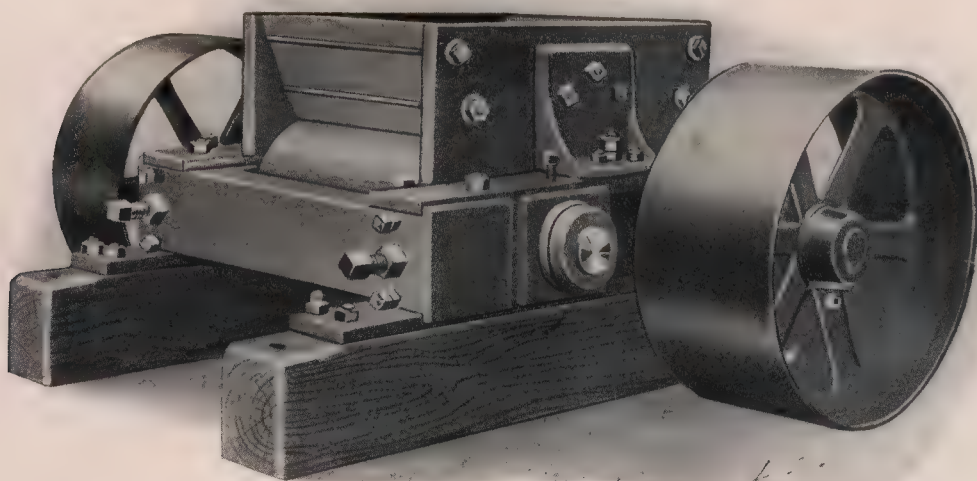
Drive pulley on 24" roll, 30" dia. 6" face.

40-50 R. P. M.

Weight 3800 lbs.

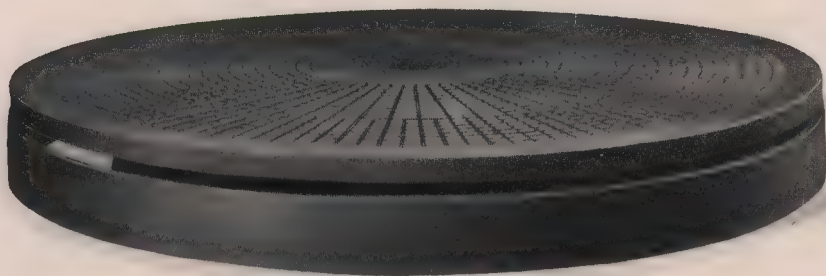


BONNOT IRON FRAME WINDING DRUM

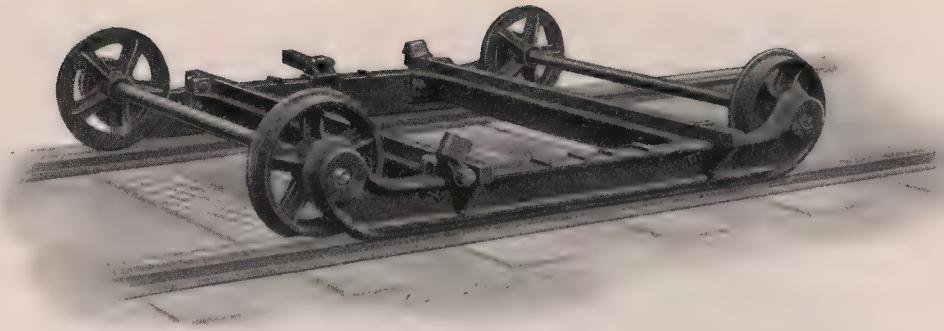


BONNOT CRUSHING ROLLS

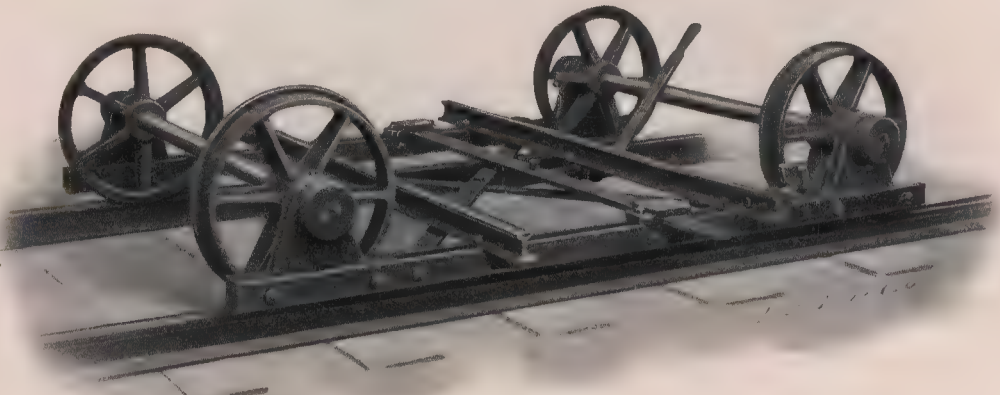




BONNOT TURNTABLE

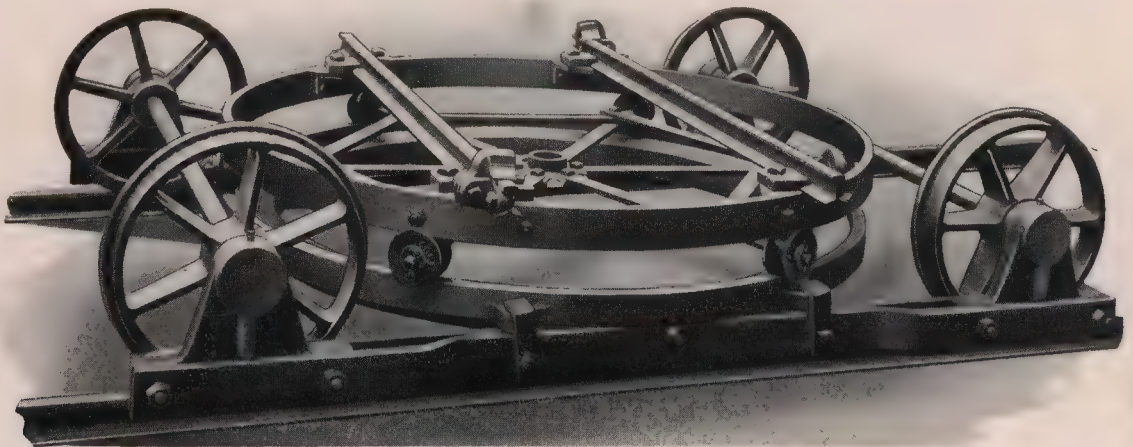


Style A

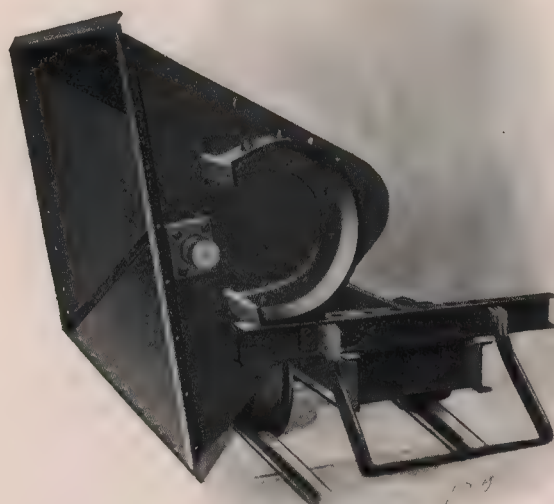
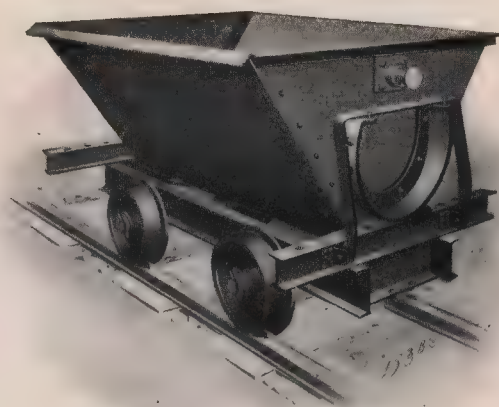


Style B

BONNOT TRANSFER CARS



BONNOT TURNTABLE TRANSFER CAR



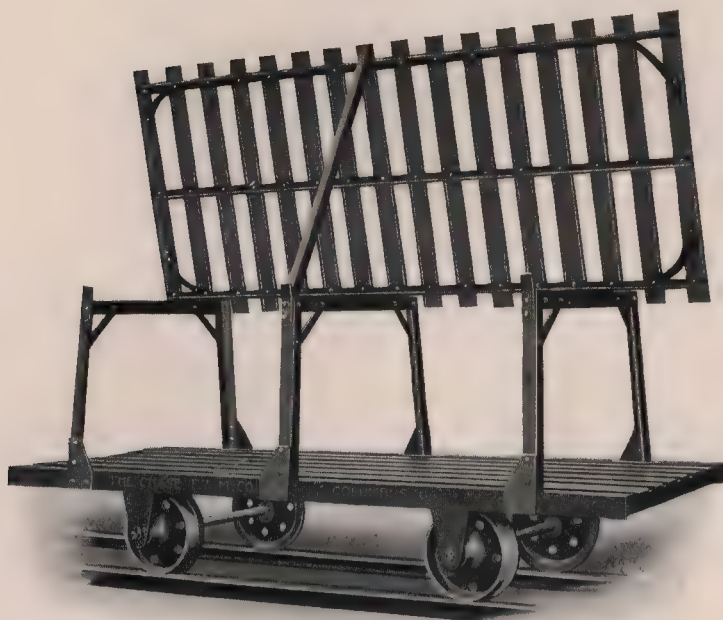
### BONNOT STEEL BED DUMP CAR

This car is made with very low frame, perfectly balanced hopper, cold rolled steel axles, steel bushed wheels and roller bearings.

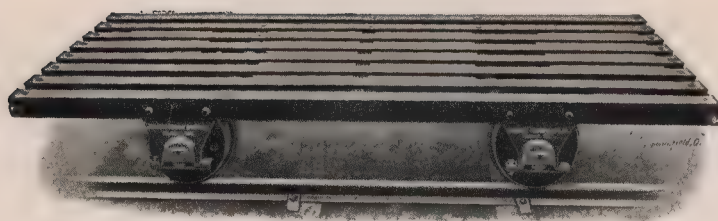
In asking for quotations, kindly state capacity, gauge of track and purposes for which they are intended. We build this car in several sizes to suit different conditions.

	Length	Width	Height	Weight
$\frac{3}{4}$ Yd. -----	5 $\frac{1}{2}$ '	4'	37"	800 lbs.
1 Yd. -----	6'	4 $\frac{1}{2}$ '	3 $\frac{1}{2}$ '	900 lbs.
1 $\frac{1}{2}$ Yd. -----	6 $\frac{1}{2}$ '	5'	4'	1500 lbs.
2 Yd. -----	7'	5 $\frac{1}{2}$ '	4 $\frac{1}{2}$ '	2000 lbs.



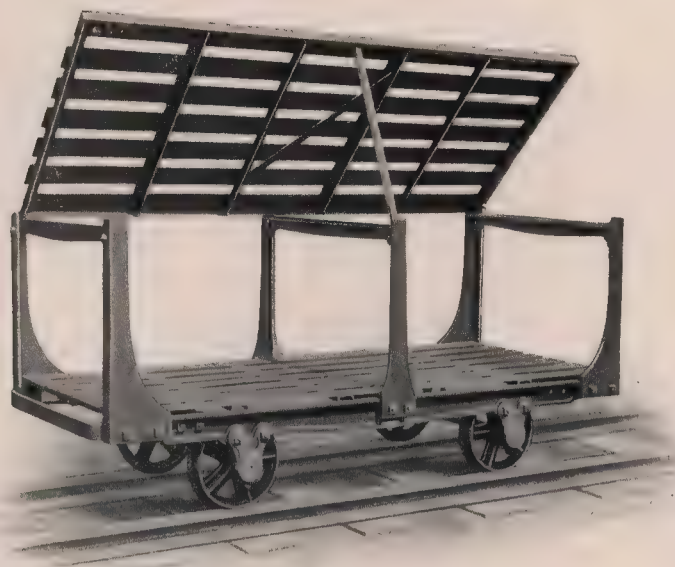


Style 306



Style 306—No. 1

BONNOT DRYER CARS

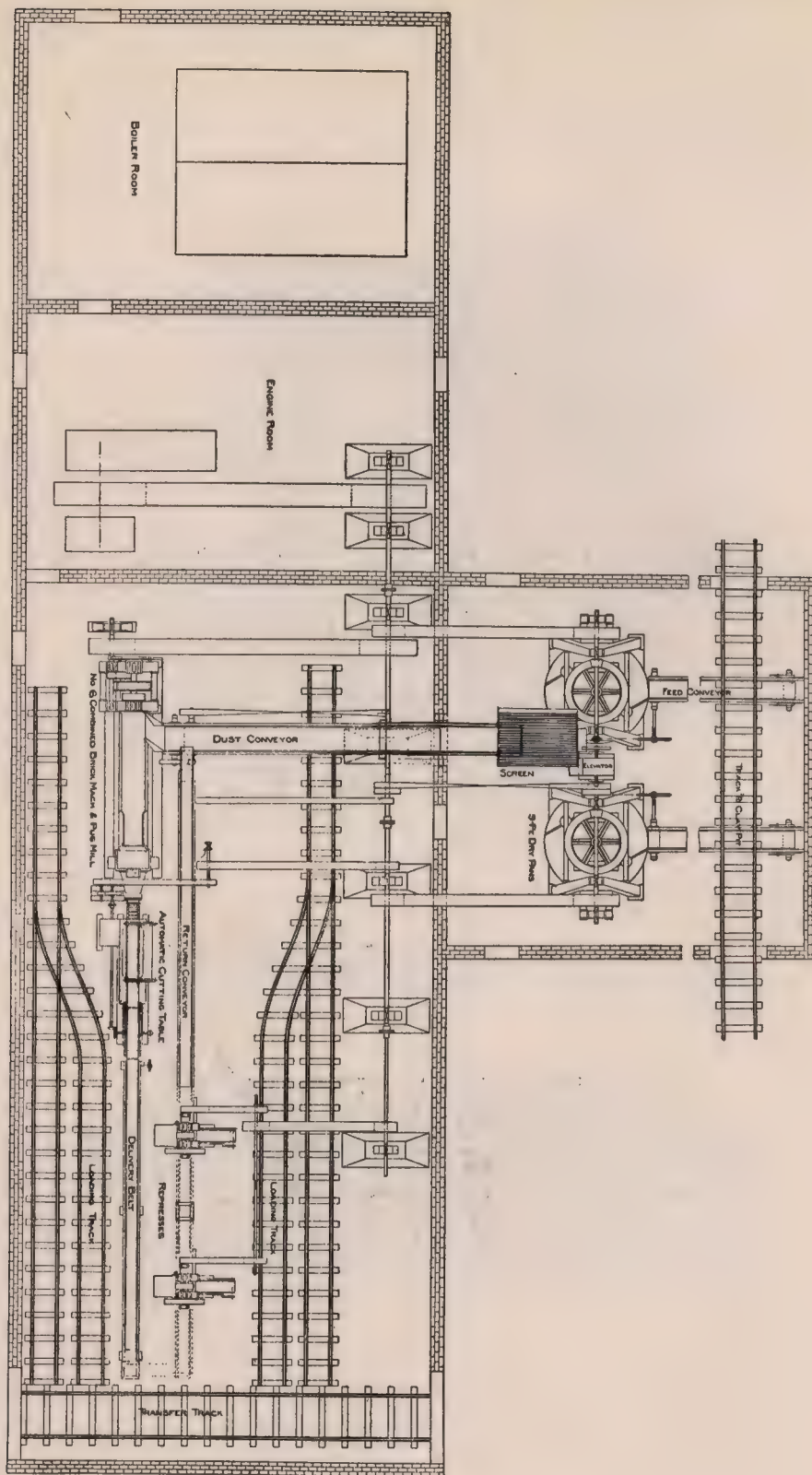


Style 8



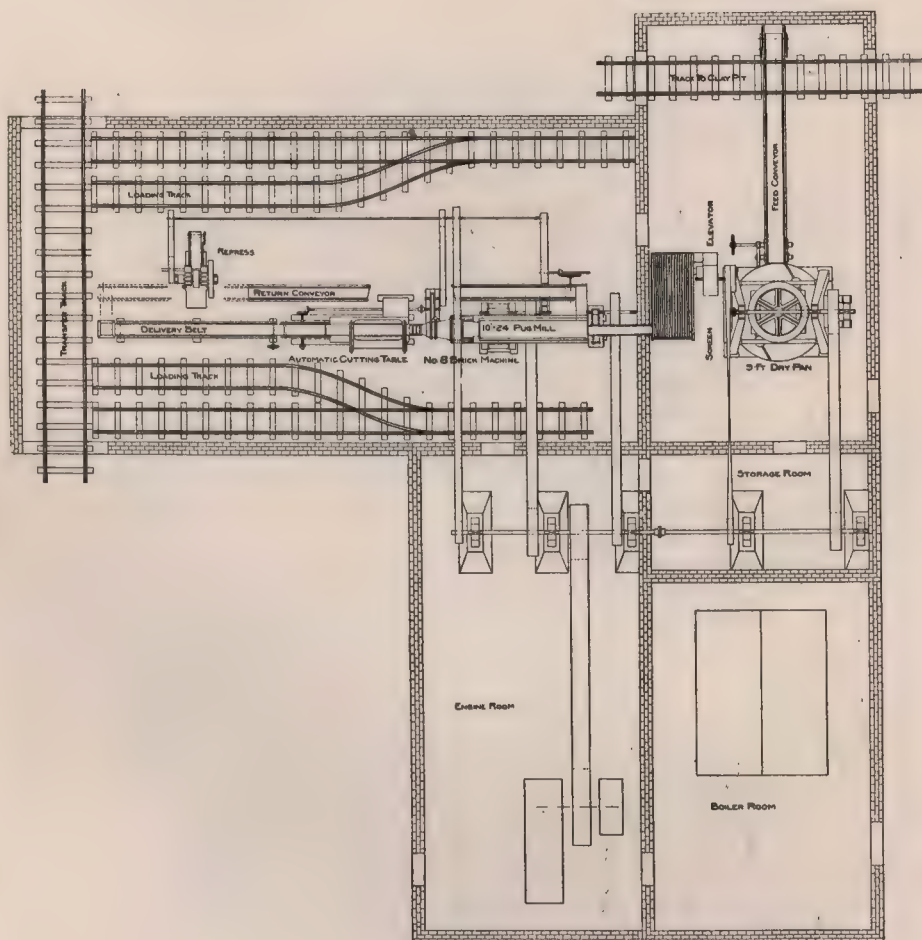
Style 306—No. 2

BONNOT DRYER CARS



PLAN FOR BRICK PLANT 50,000 DAILY CAPACITY





PLAN FOR BRICK PLANT 25,000 DAILY CAPACITY



HOLLOW-WARE PRODUCTS  
MANUFACTURED WITH BONNOT MACHINERY



## Horse Power of Pulleys and Belts

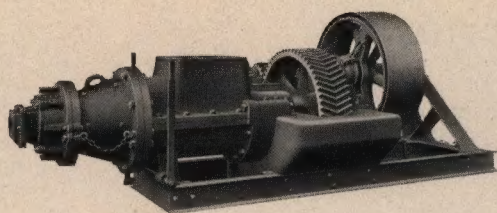
One hundred revolutions per minute of driving or driven pulleys. To find H.-P. of Double Belts multiply the powers given in the following table by 11/7. Basis of table: 1 inch single leather belt traveling 600 feet per minute equals 1 H.-P.; 1 inch double leather belt traveling 382 feet per minute equals 1 H.-P. Working load of belt equals 55 pounds per inch of width of single belts

WIDTH OF SINGLE LEATHER BELT, INCHES

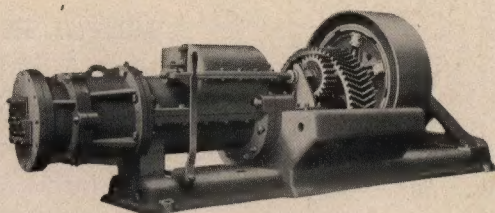
Diameter Pulley Inches	2	3	4	5	6	8	10	12	14	16	18	20	22	24	26	28	30
6	.5	.8	1.1	1.4	1.6	2.1	2.6	3.0	3.6	4.0	4.6	5.2	5.6	6.2	...	...	...
7	.6	1.0	1.3	1.6	1.8	2.4	3.0	3.6	4.2	4.8	5.4	6.0	6.6	7.2	...	...	...
8	.7	1.2	1.4	1.8	2.1	2.8	3.4	4.1	4.8	5.4	6.2	6.9	7.6	8.2	...	...	...
9	.8	1.2	1.6	2.0	2.4	3.1	3.8	4.6	5.4	6.2	7.0	7.8	8.6	9.3	...	...	...
10	.9	1.4	1.8	2.2	2.6	3.4	4.2	5.2	6.0	6.9	7.8	8.6	9.6	10.3	...	...	...
11	1.0	1.5	2.0	2.4	2.9	3.8	4.8	5.7	6.6	7.6	8.6	9.5	10.4	11.4	...	...	...
12	1.1	1.6	2.1	2.6	3.1	4.2	5.2	6.2	7.2	8.2	9.4	10.4	11.4	12.4	...	...	...
13	1.2	1.8	2.3	2.8	3.4	4.5	5.6	6.8	7.9	9.0	10.2	11.2	12.4	13.4	...	...	...
14	1.3	1.9	2.5	3.0	3.6	4.8	6.0	7.2	8.5	9.7	11.0	12.2	13.4	14.5	...	...	...
15	1.4	2.0	2.7	3.2	3.9	5.2	6.4	7.8	9.1	10.4	11.7	13.0	14.3	15.5	...	...	...
16	1.4	2.1	2.8	3.4	4.2	5.5	7.0	8.3	9.7	11.0	12.5	13.9	15.3	16.6	...	...	...
17	1.5	2.2	3.0	3.7	4.4	5.9	7.3	8.8	10.3	11.8	13.2	14.8	16.2	17.6	...	...	...
18	1.6	2.4	3.1	4.0	4.7	6.2	7.8	9.3	11.0	12.4	14.0	15.6	17.2	18.7	...	...	...
19	1.7	2.6	3.4	4.2	5.0	6.6	8.2	9.9	11.6	13.2	14.8	16.5	18.2	19.8	...	...	...
20	1.8	2.7	3.6	4.4	5.2	7.0	8.7	10.4	12.2	13.9	15.6	17.4	19.2	20.8	...	...	...
21	1.9	2.9	3.7	4.6	5.5	7.3	9.1	11.0	12.8	14.6	16.4	18.2	20.1	21.9	...	...	...
22	1.9	3.0	3.9	4.8	5.8	7.6	9.6	11.4	13.4	15.2	17.2	19.2	21.1	22.9	...	...	...
23	2.0	3.1	4.0	5.0	6.0	8.0	10.0	12.0	14.0	16.0	18.0	20.0	22.0	24.0	...	...	...
24	2.1	3.2	4.1	5.2	6.3	8.4	10.4	12.7	14.6	16.7	18.8	20.9	23.0	25.0	...	...	...
26	2.3	3.5	4.6	5.7	6.8	9.0	11.3	13.6	15.9	18.0	20.4	22.6	25.0	27.1	...	...	...
28	2.5	3.8	5.0	6.1	7.4	9.8	12.2	14.6	17.1	19.5	22.0	24.4	26.9	29.2	...	...	...
30	2.6	4.0	5.3	6.6	8.0	10.4	13.0	15.7	18.4	20.9	23.6	26.2	28.8	31.3	...	...	...
32	2.8	4.3	5.7	7.0	8.4	11.2	14.0	16.7	19.6	22.4	25.2	28.0	30.7	33.4	...	...	...
34	3.0	4.6	6.0	7.4	9.0	11.9	14.8	17.8	20.8	23.8	26.8	29.6	32.6	35.6	...	...	...
36	3.1	4.8	6.4	7.9	9.4	12.6	15.6	18.8	22.0	25.2	28.3	31.4	34.6	37.6	...	...	...
38	...	...	6.8	8.3	10.0	13.2	16.6	19.9	23.3	26.6	30.0	33.2	36.5	39.8	...	...	...
40	...	...	7.1	8.8	10.5	14.0	17.4	20.9	24.5	28.0	31.5	35.0	38.4	42.0	45.4	49.9	52.4
42	...	...	7.4	9.2	11.0	14.7	18.4	22.0	25.7	29.4	33.0	36.6	40.4	44.0	47.6	51.3	55.0
44	...	...	7.8	9.6	11.6	15.4	19.2	23.0	26.9	30.7	34.6	38.4	42.2	46.0	49.9	53.8	57.6
46	...	...	8.2	10.1	12.0	16.1	20.1	24.1	28.2	32.2	36.2	40.2	44.2	48.0	52.0	56.0	58.0
48	...	...	8.5	10.5	12.6	16.8	20.9	25.1	29.4	33.5	37.8	42.0	46.0	50.2	54.5	58.7	62.9
50	...	...	8.8	11.0	13.1	17.5	21.8	26.2	30.6	35.0	39.4	43.6	48.0	52.2	56.7	61.1	65.5
52	...	...	9.2	11.4	13.6	18.2	22.7	27.2	31.8	36.4	40.9	45.4	50.0	54.4	59.0	63.5	68.0
54	...	...	9.6	11.8	14.2	18.9	23.6	28.2	33.0	37.8	42.5	47.1	51.9	56.4	61.3	66.0	70.7
56	...	...	9.9	12.2	14.7	19.6	24.4	29.3	34.2	39.2	44.0	48.9	53.8	58.6	63.5	68.4	73.3
58	...	...	10.2	12.6	15.2	20.3	25.3	30.4	35.5	40.6	45.6	50.6	55.7	60.6	65.8	70.8	75.9
60	...	...	10.6	13.1	15.7	21.0	26.2	31.4	36.7	42.0	47.2	52.4	57.6	62.6	68.1	73.3	78.5
62	...	...	11.0	13.6	16.2	21.7	27.1	32.4	38.0	43.4	48.8	55.1	59.6	64.8	70.3	75.7	81.1
64	...	...	11.3	14.0	16.8	22.4	27.9	33.5	39.2	44.8	50.4	55.8	61.4	66.8	72.6	78.2	83.8
66	...	...	11.6	14.4	17.3	23.1	28.8	34.5	40.4	46.1	52.0	57.6	63.4	69.0	74.9	80.6	86.4
68	...	...	12.0	14.8	17.8	23.8	29.7	35.6	41.6	47.6	53.4	59.2	65.4	71.0	77.1	83.1	89.0
70	...	...	12.4	15.3	18.3	24.4	30.6	36.6	42.8	48.8	55.0	61.0	67.2	73.0	79.4	85.5	91.7
72	...	...	12.7	15.7	18.8	25.2	31.4	37.6	44.0	50.2	56.5	62.8	69.2	75.2	81.7	88.0	94.2
76	...	...	13.3	16.6	19.9	26.6	33.2	39.8	46.5	53.1	59.8	66.4	73.0	79.7	86.2	92.9	99.5
80	...	...	...	...	20.9	27.9	34.9	41.9	48.9	55.9	62.8	69.8	76.8	83.8	90.7	97.7	104.7
84	...	...	...	...	22.0	29.4	36.7	44.0	51.3	58.7	66.0	73.3	80.7	88.0	95.3	102.6	110.0

Note—Above table is given for single leather belts of best quality, short lap stock weighing 16 ounces per square foot.

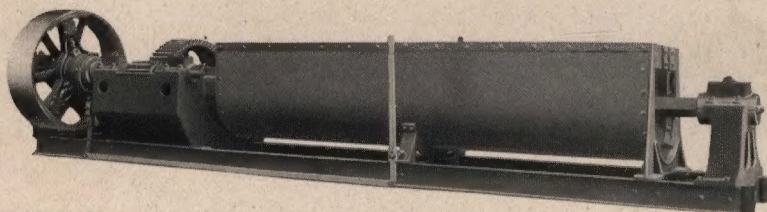




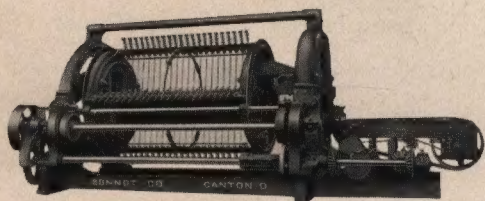
No. 18 Auger Machine



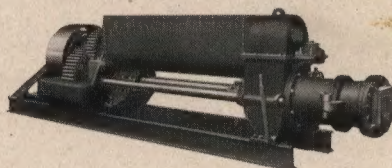
No. 20 Hollow-Ware Machine



12-foot Pugmill



Rotary Automatic Cutting Table



No. 32 Combination Machine

THE BONNOT COMPANY

CANTON, OHIO



